AN OUTLINE OF PHILOSOPHY

DR. ABDUL MATIN

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ADHUNA PRAKASHAN

An Out Line of Philosophy
Dr. Abdul Matin
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2nd Print : July 2011
First Published : August 2006

অধুনা

Adhuna 064

Published by
Noorun Nahar Chowdhury
Adhuna Prakashan
38/2ka Banglabazar, Dhaka 1100

Cover Design
Dhruba Esh

Printed by
Ekushe Printers
Shinktola, Dhaka

Price : Tk. 175.00 Only (News Print)
Tk. 225.00 Only (White Print)

ISBN 984-477-064-5 Code : 964 (News) 864 (White)

খুচরা বিক্রয় কেন্দ্র : 'সময় . . .' প্লাজা এ. আর (৪র্থ তলা), সড়ক ১৪ (নতুন) ধানমন্ডি (মিরপুর রোড, সোবহানবাগ মসজিদের পাশে), ঢাকা। ফোন : ৯১১৬৮৮৫

Foreword

Mr. Abdul Matin, Senior Lecturer, Department of Philosophy, University of Dacca deserves to be congratulated on having producd an informing and instructive book of Philosophy for B.A. Pass and Honours students.

I have read the book with considerable interest. To me it appears that Mr. Matin does not tread the beaten track as is often enough the unfortunate practice. Though lucid and popular, the book does not encourage cramming.

From intimate personal contact I can say Mr. Matin not only understands Philosophy but also loves it. He has the gift of communicating with ease his ideas to new learners. All these combined make the book readable as well as refreshing.

I would like very much to commend it as a text book for beginners and also as a popular, useful book for the lay general readers interested in Philosophy.

Dr. G.C. Dev
Professor and Head of the
Department of Philosophy.
University of Dacca

November 22, 1968

PREFACE TO THE SECOND EDITION

It is, as I should say, only after a regrettably long time that a new edition of the book is being brought out. Shortly after its publication there started in our colleges and universities a transition from English to Bangla as our medium of instruction, which naturally cut down the demand for curricular works in English. Of course, some demand for such works still remained, and I have actually been requested by many to obtain a reprint of my book. This, however, I failed to do with the result that the book began and continued to be used in the form of photocopies. I am glad that at last a new edition of the book is about to see the light.

In this new edition the book has been partially revised with, of course, no serious attempt to improve upon the first edition. My aim has been to leave its original form and content as little altered as possible. Two major exceptions to this are, firstly, that the section on the scope of philosophy has been modified with some consequent changes in the overall structure of the book, and, secondly, that a whole chapter, i.e., the chapter on the types of philosophical reasoning, has been added. Another noteworthy exception is the brief introduction to the Philosophy of Language presented in the form of an appendix rather than as a separate chapter. It may be added here that many of the appended notes to the text have, in fact, been intended as further detail on the respective topics, and may be used as additional reading material.

Unfortunately, the first edition came out with innumerable printing mistakes—some serious, some funny—which, I presume, was partly due to my absence from the place of publication. One of my main aims has been to make the book free from these and such other mistakes, and I would like to feel sure that I have not quite failed in this.

Dr. G.C. Dev, the then Head of the Department of Philosophy, Dhaka University, was kind enough to write a foreword for my work, which, however, came to me a bit too late. This foreword is being printed in the present edition. It is to be recalled here that Dr. Dev served in the Department of Philosophy for long eighteen years, first as a teacher and then as its Professor and Head. We all remember him for his extraordinary

life and work, and still as ever lament the tragic way we lost him in March, 1971, on the eve of our War of Liberation. I personally remember him for all the invaluable instructions I received from him, and especially for our long, intimate teacher-student relationship and all the affections he showed to me as to many others.

I cannot say that the book as it now stands is altogether free from defects or limitations, but I would hope that it will not quite betray its purpose as an introductory work in English.

I am grateful to all the authors and publishers of the works that have been used in writing this book. My wife, Prof. Hasina Matin, gave her all-out support and co-operation during my preparation of the first edition of this work, and has later on helped me with arrangements for publication of its present revised edition, with the hard work of proof reading and suggestions for improvement. I am extremely thankful to her for all this, and also thank my sons, Javid Imtiaz and Riyadh Saani, for helping me with computer work and otherwise.

I owe a word of thanks to Prof. Anisuzzaman, Prof. Obaidur Rahman, Prof. Bodiur Rahman, and many others of my well-wishers and former students and colleagues for the interest they have shown in the present reprint of my book. And on this occasion I once again gratefully remember Mr. M. Abul Husain, my father-in-law, and Mr. Abdus Sattar (of Iqbal Library, Gaffargaon) for the affectionate care they took of the publication of its first edition during my stay abroad.

Finally, I most sincerely thank the proprietor of Adhuna Prakashan for so graciously undertaking to publish the book, and also extend my thanks to Mr. Tarikul Islam Roni, and to all others who have worked on it.

Abdul Matin
May, 2006

First edition, Mullick Brothers, 1968
Second, revised edition, 2006

PREFACE TO THE FIRST EDITION

During my teaching Philosophy over the last few years I have always felt the need of an introductory work on General Philosophy which could adequately meet the requirements of the beginners in the field. Such a work, as I felt, must be a synthesis of factors apparently opposed. It must be simple and yet sufficiently deep, concise and yet comprehensive. The present treatise is virutally an outcome of that feeling, although I do not know how far it is at all a success. In virtue of its very purpose, however, it does not pretend to be 'too' penetrative, and also perhaps 'too' critical and precise. My attempt in it has been to talk philosophy in as simple a manner as possible - not only to students but also to general readers. In view of the standing syllabi of our universities, as well as the interests of the general readers, I have dealt with all the major philosophical problems and discussed their solutions offered by great philosophers.

The scope of philosophy is, of course, highly controversial. Perhaps no two text-books on philosophy are exactly unanimous on this point. I have, however, chosen not to enter too deep into controversy, but tried to present what philosophy has aspired to be (and should better have been if that were possible) throughout its long history. Perhaps one good result of such a procedure has been this that my treatment has been *comprehensive*, so that the reader (as a beginner) will not have to consult too many books for all that he/she needs.

In dealing with the problems, however, I have tried to give some special attention to making them clear; since a right understanding of a problem is, I think, a good short-cut to understanding its solutions already offered or finding a solution for oneself. My own observations, given particularly in the conclusions of most chapters, are intended not as final solutions but rather as a symbol of my endeavour not to leave my readers (most of whom are, presumably, beginners) in a maze of controversies or in a vacuum of sheer doubt, and also as a stimulation to further thinking.

I owe many words of gratitude to Dr. G. C. Dev, Head of the Department of Philosophy, University of Dacca, for being kind enough to

encourage me in preparing this volume, and also to Prof. J. T. Stevenson, Department of Philosophy, University of Manitoba, Canada, for going through part of the manuscript and giving a favourable opinion. I am also highly thankful to Messrs. Md. Abdur Rabb, Md. Harun-ar-Rashid and Niru Kumar Chakma, Saiyed Abdul Hai, Md. Hafizur Rahman (all of them are my colleagues), Md. Abdus Sattar, and also Faiz and Izaz, for the interest they have taken in its publication; and also to Mr. Abdul Mannan and Mr. Abdul Kadir, then assistants of the Dept. of Philosophy, for having typed the manuscript on the eve of my departure for Canada. I must also thank Mr. Rajab Ali Mullick of Mullick Brothers, Dacca, for kindly undertaking the publication of the book. And finally, I must express my gratefulness to my father-in-law, Mr. Md. Abul Husain, Deputy Magistrate, but for whose earnest efforts the publication of the book might still have been a mere hope.

A. M.

Toronto, Canada,
July 28, 1967

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PART I

INTRODUCTION

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CHAPTER I

THE NATURE AND SCOPE OF PHILOSOPHY

1. Misconceptions about philosophy

The word 'philosophy' is familiar to many, and philosophy as a subject has indeed a long history. Nevertheless, misconceptions about philosophy are only too common. To many, philosophy appears to be nothing better than unbridled but futile flights of the imagination. A philosopher is looked upon as a most unpractical sort of stargazer who mistakes his mosquito-curtain for his wrapper. He is a veritable poser who asks puzzling questions which neither he nor anybody else can possibly answer. Philosophy is a barren pursuit having no relation to science, nor any value in our work-a-day life. And, above all, its very secret design is to undermine traditions and to demolish our faith in God.

But a reading of philosophy is sure to prove to the reader that all these are sheer misconceptions, resulting from utter ignorance or shallow ideas about the subject. In fact, philosophy is neither unpractical nor useless. It has intimate relations both to science and life. It is something which every thinking man has in some form or other and cannot do without.[1]

2. We are all philosophers

It may be rightly observed that in a sense we, human beings, are all philosophers. This paradox will become clear as soon as we realise the nature of the philosophical inquiry and consider the problems it deals with. Every normal man has some notion or other about the world, about his own self, about life and its origin and goal. And every thinking man is rather instinctively interested in questions about them and looks about for their answers.[2] Now, these are some of the questions of philosophy itself. Philosophy springs from a curiosity about the secrets of nature and life, and seeks earnestly to unveil them. Hence, in a way, we are all philosophers.

There is, however, an important difference between an ordinary thinking man and a philosopher. The former has no full and clear view of

his questions, nor does he bother much for a critical and scientific approach to their answers. His answers are supplied mostly by tradition and common sense. On the contrary, a philosopher examines and classifies his questions and applies the most critical methods to work out their answers. He accepts no authority except that of logic, and renders philosophy into a most technical pursuit. It is, therefore, that anybody is not called a philosopher, and even a man, otherwise highly learned, thoughtful and renowned, does not necessarily fall into the philosophers' list.

3. The nature of philosophy

It is by no means easy to give a clear and precise definition of philosophy.* During its long history philosophy has, in fact, been conceived and practiced in quite a number of more or less different ways. Nevertheless, it may be roughly defined as a critical study of the *real* nature and meaning of the universe, along with that of our own being, by a right application of our faculty or faculties of knowledge. It is essentially an intellectual affair, a knowledge-seeking enterprise. It springs from man's natural urge to live happily and meaningfully, which is possible only in a condition of real knowledge. The word 'philosophy' derives from the Greek word 'philosophia' which means love of wisdom (phileo=love + sophia = wisdom).✧ A philosopher seeks rational knowledge of things in its fullness, with a view to its right application in the interest of ideal human existence.

Philosophy seeks to know about the inner essence of things, about the ultimate principles of nature. It asks about the nature, origin and destiny of the world. But, in knowing about the world in general, the philosopher is specially interested in his own species, i.e. man, for two reasons. The first reason is his natural curiosity about his own being. The second is that man appears to be the highest species in nature, and hence an understanding of him seems to go a long way towards understanding the universe at large. Thus, philosophy raises questions about the essence of man, the meaning and goal of his existence, about his status and values of life. In fact, the philosopher's inquiry about the world is ultimately an inquiry about himself (and vice versa). It is, therefore, that philosophy is sometimes described as an interpretation of life.

Philosophy has some special characteristics which distinguish it from other theoretic pursuits or systems of beliefs. Unlike common sense, philosophy is critical and methodical; and, in this sense, it may be called a

* Some philosophers have indeed declined to provide a definition.

✧ Alternatively : from 'philein' = 'to love' or 'philos' ='loving'

science. It is in the very nature of philosophy to doubt and examine as far as possible. But it differs from special sciences in that while each science deals with some particular department of nature, philosophy deals with the universe as a whole. As Professor Weber says, "It is the search for a comprehensive view of nature, an attempt at a universal explanation of things."[3] Further, while religion is authoritarian in method and practical in attitude, philosophy is essentially non-authoritarian and independent, and its primary interest is theoretic although it has immense practical bearing.

Thus, in brief, philosophy is essentially a science and not an art.* But, as a science, it is partly positive and partly normative. For instance, among its branches, while Cosmology and Ontology are positive, Logic and Ethics are normative. Again, it is both critical and constructive. In its critical role, it seeks to clarify our basic concepts, such as the concepts of substance, quality, matter, mind, etc. (cf.—contemporary analytic philosophy) and to examine our fundamental beliefs, such as the belief in causality, freedom of the will, God or immortality. In its constructive venture it tries to build up a comprehensive view of the world at large. Indeed, philosophy may be described as the science of all sciences insofar as it explains and examines the theoretical basis of all sciences, and aims at harmonizing their separate findings under a comprehensive world-view.

A philosopher is catholic in outlook and speculative in temper. In his attempt at a comprehensive view of the world, he tries to assign their due place to all different aspects of the world, leaving nothing unexplained, and also to do justice to all available sources of knowledge. Thus, he patiently listens to everyone — to a man of common sense, to a scientist, even to a poet and a religious believer. He also makes necessary observations of his own, reflects, and then formulates a suitable hypothesis which (1) requires no higher hypothesis to explain itself, and (2) can best explain every kind of experience or the whole system of beings. Thus philosophical knowledge is claimed to be knowledge of the highest order.**

4. Origin of philosopy

The question of the origin of philosophy is a question as to why man first began (or ever begins) to philosophize. There are more than one

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* It is a 'science' in the sense that it is a critical and systematic inquiry. And sometimes it is regarded as an art also. See Chap. II. Sec.4.

** This is only an abstract of the matter which is really very comprehensive. To explain the *nature* of philosophy would in fact be to explain its aim and method, the general nature of its questions vis-a-vis the questions of science, the sort of answers and supporting arguments that are available to it, its relation to other human pursuits, its theoretical value and practical importance, and so on.

reason for philosophical thinking, which may be briefly explained as follows.

Wonder : As an intelligent being man has a native tendency to feel curious about what is unknown or unexplained. Every mystery, in normal conditions, arrests our attention, and rouses our emotion of wonder. We feel a sort of discomfort until the mystery is uncovered. The primitive man, in that state of little intellectual advancement, found the enviornment miserably unfamiliar. Curiosity led him on to a progressive study of nature, to remove the curtain of ignorance between him and the marvellous variety of phenomena: the floating clouds of the sky, the twinkling stars in the heavens, the birth, growth and death of numberless kinds of beings. Gradually his curiosity took the shape of definite questions like those of philosophy. Thus philosophy began its journey.[4]

The need of adjustment : But, probably always, man's pursuit of knowledge has some direct or indirect relation to his biological needs. Man lives in a dual environment of physical and social forces. Life means an appropriate adjustment to this environment, which is not possible without adequate knowledge of the same. This adjustment is not only physical, but also social and psychological. Along with exploiting the forces of nature, it is also necessary to harmonise oneself to social conditions. Moreover, in a state of ignorance, life seems to have no meaning and no goal, which is not only a source of discomfort, but an obstacle in the way of progress. Hence man's inner urge to live happily and significantly has led him to think about the nature of life and the world. And if this is true of the past, it is far more so of the present. We seem to be in a state of chaos and confusion in all aspects of our life, and order and harmony can be brought about only through a dispassionate study of the situation and unbiased thinking, which is philosophy.[5] In our times, the pragmatists in particular look at philosophy from this biological standpoint.

Doubt : Philosophical speculation may spring from a state of doubt, when the mind is already occupied with ideas acquired either from wonder or from the need for adjustment. Doubt presupposes a state of knowledge. We may take to philosophical activity when we find the current ideas unsatisfactory and begin to doubt their validity. The growth of a new philosophical doctrine is generally traceable to a dissatisfaction with the existing ones. This characterises the history of Eastern and Western philosophy alike.[6]

Doubt means withdrawal of belief or suspension of judgment, and in its extreme form it may extend even to the infallibility of our sense and reason.

Deficiencies of other world-views : Incentive to philosophical thinking comes also from deficiencies in the world-views developed in common sense, or in science or religion. Common-sense views are uncritical and superficial. Sciences are critical and penetrative, but they take piecemeal and relatively unconnected views of the different aspects of the world, so that a unification of their views remains to be done. Moreover, there are certain important problems in which no sciecne is interested, e.g., the problem of value. Religion is interested in such problems and also tries to give a synthetic view of things. But its method is unsatisfactory, or at least not acceptable to an inquisitive, critical mind. Hence philosophy is required to fill up this gap between common sense, science and religion.*

5. The scope of philosophy

By the scope of a subject is meant the entire field of its inquiry or the whole list of its problems. The scope of philosophy (as traditionally viewed) is wide, inasmuch as it seeks to understand the universe as a whole, to explain all varieties of experience, and to examine the whole body of our fundamental beliefs and concepts. As John Caird puts it, "there is no province of human experience, there is nothing in the whole realm of reality, which lies beyond the domain of philosophy, or to which philosophical investigation does not extend."[7]

It is to be noted that the problems which philosophy, in the course of its long history, has been concerned with have not always been formulated or classified in exactly the same way. Also, at least in many cases it is indeed possible to look at them from more than one point of view. However, from the standpoint of subject-matter or aim, they may be grouped under *nine* heads, and accordingly we have as many 'branches' of philosophy. These branches or divisions are historically most important even though there are other divisions or sub-divisions of philosophy. These relatively important divisions are as follows.

Methodology : Methodology is simply the study or the theory of method. The word 'method' derives from two Greek words meaning 'along' and 'way'. Thus 'method' literally means 'following a way,' and a method is, in brief, any systematic procedure employed to achieve a

[7] Vide The description of philosophy as a no-man's land.

certain end. Methodology in the widest sense of the word, is a study of the method or methods employed in *any* field of human activity. It aims at describing the methods and evaluating them by a suitable criterion, logical, epistemic, moral, or simply pragmatic. For instance, we may launch a methodological inquiry concerning a certain mode of economic production or political demonstration, or a method of teaching, and consider how far it yields the expected results or is in conformity with moral principles. Methodology, however, is often taken in a restricted sense to mean by it a study of the methods of science and philosophy.* So restricted, methodology concerns itself with logic and epistemology, and is a study of all the methods employed in scientific and philosophical inquiries, such as deduction, induction and the dialectical method, and also such semilogical methods as *reductio ad absurdum* and reduction to meaninglessness.

It may be noted that whereas a large variety of methods are used in different inquiries and multifarious human activities, methodology itself is typically and uniquely a philosophical enterprise. Philosophy, in its methodological inquiry, asks about its own method or methods, and consider whether or how far it is possible to attain 'certain' knowlege by their means. Just as a man should examine his own fitness before undertaking a responsibility, so also should philosophy (or any science) weigh its own competence and consider the suitability of its procedure before attempting to answer its questions. All this speaks for the great importance of methodology as a branch of philosophy.

Epistemology : The next important branch of philosophy is epistemology (from Gk. 'episteme' = knowledge), also called the Theory of Knowledge. It inquires about the nature, source, status and extent of knowledge. Its basic questions are : What is knowledge, or what is the meaning of the word 'knowledge'? Knowledge is not mere opinion or belief. What, then, should be added to a belief, so that it becomes knowledge? A belief, in order to be knowledge, must be a *justified* one (must be warranted by *evidence*). But how can we distinguish beliefs which are justified from those which are not? It is customary to take sense, reason and intuition as sources of knowledge. But is each of them a source of 'certain' or indubitable knowledge? What is truth, and what are its criteria? Is there any limit to human knowledge?

Such are the questions of epistemology, and a philosopher has to ask

* Methodology "is also called scientific method" (Runes, *Dictionary of Philosophy*, p. 196). Also notice that, in the *Ency. of Philosophy*, ed. by Paul Edwards, methodology is straightaway referred to the entry on 'Scientific Method', there being no separate treatment of methodology.

them before he embarks on answering his questions (ontological, moral, etc.) of primary interest. It is obvious that even though epistemology is partly descriptive, it is essentially a normative study which sets standards by which to separate knowledge proper from mere belief or blind faith.

Cosmology : The word 'cosmology' derives from the Greek word, 'kosmos', which means the ordered universe. This branch of philosophy studies the different observable features of the world and their mutual relationship. We ask, for instance, about the visible world, about space, time, matter and life, about motion and change and the Laws of Nature. It also inquires about the origin and development of the world. It asks whether the world is eternal or has a beginning in time, how it comes to have the multiple kinds of beings, and whether its origin and growth are purely mechanical or purposive. This branch of philosophy is also called the Philosophy of Nature or Phenomenology.

Ontology or Metaphysics : It is the study of the ultimate principle or the basic stuff of things. The word 'ontology' comes from Greek 'ontos' (being) and 'logos' which together mean the 'science of being'. Here we ask about the nature and number of the ultimate stuff of the world. Is the world made of some ultimate kind of being such as matter, energy or spirit, so that the great variety of things are but the different modifications of this ultimate stuff? Ontology is also called 'metaphysics' which literally means 'after physics'. Aristotle called it First Philosophy, the science of the essence of things. It is traditionally the most important branch, the central part of philosophy (although of late its very possibility has been seriously doubted and its interest almost entirely lost, particularly in the West).

Anthropology or the Philosophy of Man : As already indicated, although the study of the world includes the study of man, yet man deserves a special consideration. Anthropology is the *philosophical* (not physiological or historical, for example) study of man and is more appropriately called 'Philosophical Anthropology'. It inquires about the essence, origin, value and significance of man's being and also about his position in the scheme of things. It asks whether man is a combination of body and soul; and if so, how these two are related. What is meant by the immortality of soul? How far is immortality a fact? Is man free or determined? And so on. Many of these problems are now brought under a very important branch of philosophy called 'the Philosophy of Mind'.

Axiology : This is a study of the cardinal values of life. Values are the

supreme norms of human life, of which we talk and hear so much. Axiology investigates the nature and kinds of values and the problem of their objectivity. It asks: What are the values and how do they differ from facts? Are they subjective or objective? What relation do they bear to life and reality? The name, 'axiology', is modern, although the science had its rise in Plato's theory of Ideas. Axiology in a wide sense includes the general Theory of Value, Aesthetics and Ethics.

Philosophy of Religion : This branch of philosophy inquires about religious phenomena in general, and the nature and existence of God in particular. It studies and evaluates the nature of religion, religious attitudes and ideas, revelation and religious experience, and, finally, the various proofs for the existence of the Divine Being. "Philosophy of religion", says Brightman, "is an attempt to discover by rational interpretation of religion and its relations to other types of experience, the truth of religious belief and the value of religious attitudes and practices." (*A Philo. of Religion*, p. 22). It also inquires about the place of religion in man's life and the future of religion vis-a-vis the ongoing advancement of natural sciences.

Ethics : "Ethics", says Mackenzie, "may be defined as the study of what is right or good in conduct." (*A Manual of Ethics*, p.1) It is also called 'moral philosophy', i.e., "philosophical thinking about morality, moral problems, and moral judgments."* More precisely, ethics is an inquiry concerning the goodness or badness, or rightness or wrongness, of the conduct of human beings living in a society.† It asks about the meaning of 'good' or 'right' and elucidates the notions of duty, obligation and virtue. Its chief object is to define the ultimate *standard* of moral action, to formulate rules by which we are to judge which actions are right, or which conduct or character is virtuous.

Ethics has traditionally been called a normative science, but of late a distinction has been made between 'normative ethics' and 'metaethics.' Whereas normative ethics investigates the problem of the criterion of moral action, metaethics is a semantical and logical inquiry concerning the meanings of moral terms and the forms and standards of moral reasoning. Ethics, however, differs from Casuistry: whereas ethics is essentially a *theoretical* investigation of the supreme moral law, casuistry has the *practical* aim of judging the moral worth of particular actions in the light

* W.K. Frankena, *Ethics* (Prentice-Hall, 1963), p.3.

† The word 'ethics' derives from Greek 'ethos' which means disposition or character, and 'moral' from Latin 'mores' which means habits or customs.

of the moral law and all other relevant cosiderations.

Philosophy of Life : It is an inquiry concerning the nature and conditions of human life, concerning its meaning, worth and ultimate goal or goals, and as to the best of our available means to them. In this inquiry the philosopher does not look at life from the cosmic or biological point of view, but from a comprehensive *practical* standpoint of 'good life' or what may be called 'successful living' involving virtue, happiness, and in fact all forms of attainable human excellence. Some of its questions are : Is life worth living? If so, what is its supreme goal, or what are the ultimate ends that we are to seek? And what should we do—what sort of social system, for instance, should we have—in order to achieve these ends?

Naturally, a philosophy of life will grow in the light of our findings in practically all the other branches of philosophy as well as our scientific knowledge. Philosophy of life involves ethics, but is wider in scope. It should be obvious that it is here that philosophy as an intellectual pursuit and life as a practical concern meet most directly and intimately.[8]

6. The method of philosophy

By the method of a study is meant the way of investigating its subject-matter. On the question of the proper method of philosophy, philosophers are broadly divided into two schools, viz, the intellectualists and the intuitionists. The intellectualists maintain that there is no fundamental difference between the method of philosophy and that of science. In fact, philosophy is one among the sciences, though undoubtedly the highest and the most comprehensive of them. Intellect is the organ of science, and science seeks to be unbiased, non-authoritarian, critical and systematic. The same is true of philosophy.

But even among the intellectualists, there are divisions. The rationalists liken philosophy to a deductive science like Mathematics. According to them, experience is doubtful or even misleading, and the proper method of philosophy is logical thinking. The empiricists, on the contrary, compare philosophy to the empirical inductive sciences such as Physics and Biology. In their opinion, philosophy studies (though not exactly like an empirical science) facts relevant to its purpose and explains by bringing them under a suitable hypothesis.[9]

The intuitionists contend that intellect may be an appropriate organ of science, and a workable guide in the ordinary practical life, but it is unfit for the sort of truth which philosophy seeks. The ultimate reality is of such a nature that neither sense nor reason (which are the two aspects of

intellect) can approach it. There is instead a third faculty, namely, intuition, which overcomes the limitations of intellect and enters right into the very heart of reality. Philosophy, in short, is something essentially different from science. It is non-rational, non-reflective and non-discursive.

Compared with the intellectualists, the intuitionists constitute a negligible minority. There are certain arguments against the intuitionists.* They create a gulf between science and philosophy and gives the latter a mysterious, doubtful basis. No study can claim general acceptance unless it is based on reason, since reason alone can afford a general standard of justification or proof. Indeed, the intuitionists themselves argue in intellectual terms in order to earn general approval. In fine, the intellectualists seem to be in the right. Philosophy is essentially an intellectual enterprise and seeks a general body of verified truths by means of analysis and the methods of logic. As Russell has aptly pointed out, it is a sort of no-man's land between science and theology, trying to answer the questions of the latter by the method of the former. [10]

However, although philosophy is, in spirit and aim, scientific, it is neither mathematics nor an empirical science. The kind of questions it is concerned with do not admit of methematical demonstration or any strightforward empirical dispensation. We cannot, for instance, say whether there are universals, whether the human will is free, whether our sensations represent the real qualities of things or whether the univese had a beginning, by a direct appeal to experience. Hence, everything considered, the proper method of philosophy, the method appropriate to its questions, is, in a word, *reflection* (reflective thinking), i.e., "argument and analysis."

7. Objective of philosophy

Every conscious activity of man springs from a motive, and proceeds towards a goal. Philosophy is a pursuit of knowledge, and any pursuit of knowledge may have a two-fold end: a certain body of knowledge, and the application of the same with a view to human welfare. A pursuit is purely theoretic when the end is knowledge for its own sake; practical, when human wellbeing is the ultimate end. In scientific pursuits, usually, a combination of these two is the whole end. This is true of philosophy as well. Thus the objcetive of philosophy is two-fold:

(1) Theoretic (or intellectual) : Wonder and doubt are said to be the primary sources of philosophy. Thus its aim is primarily the satisfaction of our curiosity and escape from the uncomfortable state of ignorance

* For a detailed treatment see Chap. VI.

through acquisiton of pure knowledge and a critical examination of our beliefs and doubts.

(2) **Practical** : But philosophy is not without concern with our problems of practical life. It is not possible to determine the basic principles of life without some knowledge bf the kind of world we live in, or the type of existence we have. Thinking things thoroughly in absolute freedom from prejudice, error or parochialism, is indispensable to a right weighing of the multifarious interests of our life and guiding ourselves in the light of the best synthesis and ordering of them, for the realisation of the highest ideal or the summum bonum. Such thinking is philosophy.

Socrates, the great philosopher of early Greece, was motivated by practical interests. His aim was to discover and propagate the best way of life, and thus his teachings were mainly of an ethical character. This attitude has been displayed, more or less in almost all the great philosophical systems, of the East and the West alike. This is rather a prominent tendency of the present times, as represented by such renowned systems as pragmatism and existentialism. In fine, the aim of a complete philosopher is or should be the application of his theoretic findings for the wellbeing of humanity at large, if not fruther. One of the branches of philosophy, namely, the philosophy of life, is (as we have seen) out and out a study of the problems of practical life.[11]

8. Two great functions of philosophy

Philosophy aims at the attainment of a certain kind of knowledge and the regulation of life towards the summum bonum in the light of that knowledge. This entails a two-fold function of philosophy: Critical or analytic, and Constructive or synthetic.

Critical : It is the first great function of philosophy, in which it brings under a critical examination our intellectual tools and tries to assess their real validity and importance. The special sciences make use of certain general concepts; but "whilst all the special sciences use these concepts, none of them is about these concepts as such."[12] These are, for example, the concepts of matter, life, mind, energy, space, time, thing, quality, quantity, number, chance, law, etc.

There are also certain principles, which they assume uncritically, e.g., the principle that every event has a cause. All these are for science assumptions constituting its very basis or its indispensable starting-point. A critical examination of such assumptions by science itself would be a step beyond its own field. But these concepts and principles are not in fact as clear or as indubitable as they seem, and it is necessary to bring them

under a critical analysis before they are accepted finally.

Not only this, those general concepts which are used in philosophy and our daily life do also come under the philosopher's examination, e.g., the concepts of knowledge, belief, good, evil, purpose, God, truth, beauty, etc. Even the method of investigation and the general criteria of truth have to be examined thoroughly. This part of the philosopher's work is one of critical analysis, by which he clarifies the meanings of those concepts and principles, and helps us see how far the principles are true, or false or doubtful. Most of this work belongs to the methodological branch of philosophy, and the resultant philosophy is called Critical or Analytical Philosophy.

Constructive : Here philosophy tries to answer its basic questions about the world, and constructs systems on the basis of all that is acquired from experience and its analytic work. "Its business is to take over all aspects of human experience, to reflect upon them, and to try to think out a view of Reality as a whole which shall do justice to all of them".[1] It is synthetic both (a) in consolidating all our experiences and all our interests into a comprehensive view of the world, and (b) in bringing all aspects of the world under the view so constructed. All knowledge on the one hand, and all reality on the other, is the field of its synthetic operation.

Of late, however, the constructive function is more and more yielding its age-old predominance to the critical. Contemporary philosophy is almost entirely critical and analytic, as represented particularly by the neo-realists and the logical positivists. This is clearly visible also in the up-to-date introductory works on philosophy. For example, Paul Edwards and Arthur Pap, in their joint work, *A Modern Introduction to Philosophy*, defines philosophy as "critical reflection on the justification of the basic human beliefs and analysis of basic concepts in terms of which such beliefs are expressed." (Introduction, p.xii)

CHAPTER II

PHILOSOPHY AND OTHER PURSUITS

Having seen what philosophy is and does, we are now in a position to see its relation to other pursuits: other sources of knowledge and other human occupations. We shall consider mainly the relation of philosophy to common sense, science and religion. Last of all, we shall try to show the relation between philosophy and life, since life itself may be called a pursuit, nay, the most important of all pursuits.

1. Philosophy and common sense

The relation of philosophy to common sense is important, because the latter has a very important place in man's life. Ordinarily, common sense means good sense or practical sagacity. But we shall understand by it 'the aggregate of views which by any group is commonly held without serious question' (Cunningham). With the exception of a small minority, man is guided mainly by common sense. But common sense has certain obvious limitations. It arises almost entirely from a practical motive as a workable guide in man's day-to-day activities. Ordinary experience, authority, tradition and more or less loose thinking are its sources. Hence, it is often full of mistakes, and requires correction by scientific or philosophical scrutiny.

On the contrary, the motive of philosophy is primarily theoretic, i.e., quest for truth or real knowledge. It accepts no authority or tradition without examination, and its method is unbiased observation and logical thinking. Not that common sense is not at all critical and unbiased; but it is only insufficiently so. History is full of wrong conceptions persistently upheld by common men. Common sense is narrow in outlook and conservative in character, looking upon its unbelievers 'with hostile suspicion as unreliable and uncalculable.' But philosophy is wide in outlook and is open to criticism, correction and development by scientific methods.

Common sense views are more or less unsystematic and are expressed in the simple every-day language which does not care so much for clarity

or precision. Philosophical views are generally worked into explicit systems or world-views and are often couched in an uncommon technical vocabulary. Being uncritical and unmethodical, common sense is marked with inconsistencies and varies widely from group to group. But consistency is the very pulse-beat of philosophy; and the characteristic effort of philosophy is to overcome differences and disagreements on a common rational basis.

But, in spite of these important points of difference, the two are not without relations. Philosophy arises partly from dissatisfaction with common sense, and yet it cannot dogmatically set common sense aside. In brief, philosophy and common sense cannot ignore each other. On the one hand, philosophy, in developing its views, takes into account our common ideas and beliefs as well as the findings of science. On the other hand, common sense, because of its inherent limitations, connot stand by itself and requires to be scrutinized by logical methods. Without this, common sense breaks down from its own weight of errors and fails its own purpose.

2. Philosophy and Science

The relation between philosophy and science is very intimate. It is indeed far more intimate than is popularly conceived. In the narrower sense, 'science' means any systematic body of knowledge relating to a particular department of nature, e.g., the natural sciences like physics, chemistry, biology, astronomy, etc. In the wider sense, by science is meant 'any logical and systematic study.' Philosophy is no other than a science in this broad sense of the term. There are pionts of similarity, difference and inter-relation between them, which may be considered under the following heads:

Origin and aim : Philosophy and science spring from the same feeling of wonder coupled with a pressure of practical needs. Their aim is both theoretic and practical. Science not only seeks to know; the theoretic knowledge of science is also applied for man's welfare. Similarly, philosophy is not solely interested in theoretic issues like the origin of the world and the existence of God. The ulterior aim of philosophy is to make life happy, smooth and meaningful, by redeeming man's mind of all false notions and harmful prejudices.

But the subject-matters of the two are not exactly identical. At the beginning, there was no clear division between science and philosophy. Instead, all the different sciences were merged in a common study which was philosophy. As the wealth of knowledge increased it was impossible for a single man to deal with the entire field. Consequently, diferent lines

of investigation were gradually severed from philosophy and established as independent sciences. It is thus that each science has come to study a cross-section of Nature, and become selective and limited in scope. Physics, for instance, deals with the general laws of physical substances, biology with the sphere of living beings, astronomy with heavenly bodies, and so on. But philosophy embraces the entire universe in its scope and tries to present a comprehensive view in which all types of things find their legitimate place.[1] It leaves nothing unconsidered, but tries to develop a world-view in which the nature, origin and inter-relation of all categories of beings are explained (See Note 1 on this chapter).

Method : The intuitionists, including Henry Bergson, maintain that philosophy differs fundamentally from science in respect of method. While science works by the intellectual methods of induction and deduction, philosophical truth can be attained only by a third and higher method, viz, intuition. The general oipinion, however, is that philosophy, like science, is intellectualistic. Intellect, roughly speaking, works either inductively or deductively. The method of such natural sciences as physics and biology is inductive; while that of such formal sciences as mathematics is deductive. Among the intellectualists, the rationalists maintain that the method of philosophy is deductive; while the empiricists hold that it is in some sense inductive. But, whether deductive or inductive, the method is scientific in the sense that it is logical and critical.

There is, however, a difference. The inductive method has two broad aspects : (a) observation of facts, and (b) formulation and verification of hypotheses. In the procedure of philosophy (when it is empirical), observation is done mostly by the sciences; and what remains for it is mainly the analysis of scientific data and thinking out a suitable hypothesis by which the facts can be explained. It is, therefore, that while science is mainly observational and experimental, philosophy is mainly analytic, and reflective or speculative. It is rightly said that philosophy begins where science ends. Whereas a science starts with particular facts and arrive at their laws, philosophical world-views start with these laws and arrive at a more ultimate body of principles.

Interaction : It follows from what has been said above that philosophy and science, far from being contradictory, are rather complementary of each other. They give to each what the other lacks, and through that, each gives us what the other is unable to give.

Philosophy is supplied by science with data about the world. The ideal philosopher must be acquainted with the fundamentals of all sciences. On the other hand, philosophy supplies science with a solid theoretic basis by

examining and clarifying its basic concepts.[2] Philosophy also makes for the deficiencies of particular sciences by co-ordinating their fragmentary accounts into a complete and connected world-view, but for which our knowledge remains loose and partial.

In the practical sphere, while science is doing much for man's material needs, philosophy is supplying his spiritual needs. Even our material prosperity is not possible without corresponding mental, moral or spiritual progress. Philosophy investigates the supreme ends of human life, while science supplies the means to their realization. Hence we need both philosophy and science even for bare existence, not to speak of truly 'human' existence.[3]

3. Philosophy and Religion

The relation between philosophy and religion is also more intimate than popularly supposed. While philosophy is a systematic study of reality and of the highest good of life, religion may be defined* as a feeling of dependence upon some supernatural power or powers believed to control the destiny of man, accompanied by a desire to come into friendly relations with the same (cf. Brightman). The relation between the two may be considered under different heads as follows.

Similarity :

(a) Both philosophy and religion present a view of the world. Unlike science, they both seek an interpretation of experience and evalutaion of objects on a *comprehensive* scale, in which man is given supreme importance. There are many problems of religion in which philosophy is interested, e.g., the problems of soul, immortality, divinity, creation and so on. There is no science interested in such problems; so that, following Bertrand Russell, we may describe philosophy as a study of the problems of religion by the methods of science.

(b) While science is mechanistic and naturalistic in attitude and has a tendency to take a quantitative view of all distinctions, religion generally rests upon supernaturalism, takes a teleological view of things and strongly believes in qualitative differences. Philosophy has no necessary bias against supernaturalism or teleology, and its long tradition has a remarkably religious colour. As William James might put it, philosophy considerably shares the 'tender-mindedness' of religion, and, like the latter, has a soft corner for man's deeper longings of the heart.

* Religion has been defined in a great variety of ways. For a fuller understanding of the nature of religion and its relation to philosophy read Chapter XXIV.

Difference :

(a) But while primarily philosophy is theoretic, religion is practical. The primary goal of philosophy is indubitable knowledge. But religion is primarily a guide to peaceful and harmonious existence leading to salvation. It has a practical and spiritual, as well as a theoretic aspect, of which the former is far more important. While the primary emphasis of philosophy is upon intellectual enlightenment, that of religion is uopn moral virtue and spiritual communion with the supreme reality.

(b) Religion has two broad sides: *conception* and *injunction*. In its theoretic, practical and spiritual aspects, religion (in general) has a three-fold motto: good faith, good action and good worship. But religion does not merely give a conception or theory of them, but enjoins upon its followers the duty of living up to that conception. Religion commands in practice what it conceives in theory. But philosophy has no such aspect of injunction. It stops at giving a conception of good life, but the responsibility of imposing it upon man lies with reformers and social leaders.

(c) Even in the theoretic aspect, the two have important points of difference. Philosophy is critical in temper and scientific in method. But religion is mostly a matter of faith and accepts ideas and principles upon authority. While philosophy leaves the door of free thinking and critical knowledge open to every individual, religion believes in special privileges granted by the Divinity to a select few.[4] Philosophy will follow reason to whatever conclusion it leads to, but religion only insofar as it serves the purpose of its creed. It is said that while philosophy is for the head, religion is for the heart.

Inter-relation :

(a) But, in spite of important points of difference, the two are complementary rather than antagonistic. Since the ulterior aim of philosophy is human well-being, it must sympathise with the gospel of righteousness and brotherhood embodied in any true religion. On the other hand, every great religion not only supports but encourages man's intellectual pursuits: Islam, for example, says that an hour's meditation is superior to a thousand nights' prayer.

(b) Historically, philosophy and religon have immensely influenced each other. It is manifest, on the one hand, in the evolution of religious faiths and, on the other, in the religious tone of philosophy of all times. Even Descartes, the very father of modern philosophy, confessed that he had no mind to oppose religion but philosophized only in order to

convince the atheists.

(c) Philosophy and religon, when sympathetically viewed, may render valuable service to each other. A rational consideration of religions may present them in their true light and perspective and thereby provide them with a stronger basis. When different religious dogmas appear to conflict, lead to quarrels among their followers, and thereby lower the prestige of religion, unbiased and critical thinking (which is philosophy) alone can supply necessary refinements and bring about peace and harmony. On the other hand, religious facts and experiences constitute part of the basis of philosophical thinking. And when thought ends in agnosticism, faith remains the much-needed rescue. Philosophy and religion need not be enemies; and they are not so as long as the former is not dogmatically materialistic, and the latter dogmatically orthodox.[5]

4. Philosophy and Art

Philosophy is a theoretic pursuit of knowledge and is, therefore, no other than a science in the broad sense of the term. It is a science at a higher level above all 'particular' sciences. But science and art are intimately related. Such arts as those of cooking, farming and pharmacy have a theoretic basis in science. Again, arts like those of literature or poetry have a theoretic aspect. We may, therefore, have a comparison between philosophy and art and consider their relation.

We may indeed talk of an art of living as an aggregate of all the particular arts. And then philosophy may be said to constitute the theoretic basis of this art. Just as the knowledge of science is applied to practice as a basis of particular arts, the conclusions of philosophy, provisional or not, are similarly applied as the basis of this mother art of living itself. In a sense, philosophy may be regarded as itself an art. Sometimes it has actually been so regarded and described as the art of thinking things through, nay, the very art of living. Further, one of the branches of philosophy, namely, axiology, deals with the fundamentals of the aesthetic arts.

5. Philosophy and Literature

The relation of philosophy to literature is more conspicuous and important than to the other special arts. The object of literature has two aspects, entertainment and instruction, of which the former is probably more fundamental. The literary man mainly seeks to stimulate and delight the mind rather than instruct. Literature, as they say, is the mirror of life—not necessarily the mirror of *truth*. The litterateur's function is to record memorable experiences of past and present, to place before his readers

pictures of life in its unforgettable aspects of profound pleasure and pain, success and failure, beauty and ugliness, excellence and non-excellence. He may interpret life and present a world-view. But his method need not be too critical, for he is not primarily after the ultimate truth. He is content with telling us 'just how he feels, how things look to him.' "What he writes may thus be far more readable, and far closer to the popular taste. But truth is elusive, and is not to be won in any such simple way."[6]

6. Philosophy and Poetry

. And this is even more true of poetry. Some poems are historical or descriptive, while the others seek to interpret life. The former describe a concrete situation, or a charming and delightful quality of experience; the latter spring from the poet's piercing insight or high-soaring vision of things. This insight or vision is analogous to the philosopher's insight insofar as it equally ventures to break with common sense and ascend high above the ground to have a broad, generalised view of things. Poetry is a fine art, an art of beauty. In a nutshell, it is a beautiful idea dressed up in a beautiful diction. But great poetry is great as much in virtue of its ideas as in their verbal attire (cf. a beautiful human form). It has, generally, a metaphysical content, dealing with the same august and persistent issues as metaphysics. We find its classical illustrations in Sophocles, Omar Khyyam, Dante, Goethe, Milton, Wordsworth, Iqbal, Tagore, and so on. Following R.B. Perry we may call them 'philospher-poets'.

But in spite of this there remains a gulf of difference between poetry and philosophy. Firstly, although great poetry may have a metaphysical structure of thought, it need not deal with all the technical problems comprised in philosophy's scope. They differ even in the ulterior object which they seek in their undertaking of such problems. While philosophy primarily seeks truth or infallible knowledge, poetry primarily a superior kind of aesthetic delight. Philosophy aims at the satisfaction of our understanding, poetry of our aesthetic taste. While the former appeals to the intellectual, the latter to the emotional aspect of our mind.

Secondly, while the method of philosophy is critical, scientific and ratiocinative, poetry is mainly a matter of feeling. For philosophy, the supreme court of appeal is reason. But poetry is more or less a flight of imagination and accepts things as they appear to its vision. It may incidentally have a background of rational arguments, but it does not and need not bother seriously about them. As it is rightly said, while poetry at most *employs* argument, philosophy *is* an argument.

Even in their mode of exposition they differ essentially. Poetry ceases to be poetry, if its language be not flowery, decorated with the fineries of

a rhythmic and rhapsodic diction and charming similes, even at the cost of clarity. Poetic comprehension is symbolic, and exposition not necessarily systematic. The merit of philosophy, on the contrary, is largely determined by its non-symbolic conceptual comprehension and systematic expostion in a clear and precise language. It is because of this that a combination of philosophy and poetry is not desirable beyond a certain limit. Too much of metaphysical subtleties may mar the beauty of a poem, and too much of linguistic fineries may obscure the thought-content of a philosophical system. Side by side with philosopher-poets we may have 'poet-philosophers', i.e., philosophers who will have a tinge of poetry without any serious damage to their philosophic thoughts; but a combination of poetry and philosophy of any other sort is, as W.T. Stace would say, "an exceedingly dangerous combination." (Vide-his *Hist. of Gk. Philosophy*, p.170)

7. Philosophy and Life

Philosophy and life are very intimately related (as already indicated more than once). Human life without some sort of philosophical basis is unthinkable and is never the case, except in the primitive days of ignorance and barbarism. Philosophy not only provides for man's intellectual satisfaction, but is deeply interested in his practical problems. It lays the foundation of man's peaceful and harmonious co-existence by eradicating prejudices and resolving the conflicts between dogmatic beliefs or selfish practical interests. It also defines the highest ends of human life and suggests the best methods of their realisation. This is done particularly in three branches of philosophy, viz. in ethics and the philosophy of religion, and above all in the philosophy of life.*

8. Philosophy and Metaphysics

The term, 'metaphysics', is taken in more than one sense.

(a) In its narrower sense, it is identified with ontology, literally the science of being qua being. Ontology is that part of philosophy which investigates the 'first causes' or the first, ultimate or most general principles of reality. In his works, Aristotle called this inquiry 'First Philosophy'. The name 'Ontology' was given to it by Christian Wolff, a German philosopher of the 17th century. The word, 'metaphysics', is introduced in 70 B.C. by Andronicus who gave this title to the ontological doctrine of Aristotle, probably because he placed it after Aristotle's physics in his edition of Aristotle's works. 'Meta' means 'after'; hence

* A full consideration of the matter is postponed till the chapter on 'Is Philosophy Worth While?' since the question of philosophy's relation to life is part of the question of its worth and importance.

'metaphysics' means what comes after physics. The literal sense of the word may have only an incidental significance in the historic or Aristotelian context, but its significance becomes necessary in the context of the true philosophical procedure. Physics, that is, a scientific study of the world, should precede (as has been shown) the proper speculative venture of philosophy, whose very core is ontology. In this sense, however, metaphysics is only a *part* of philosophy, though no doubt the most important of all parts.

(b) In its wider sense, 'metaphysics' means any sepculative inquiry about the ultimates or fundamentals of things. In this sense it extends beyond ontology, virtually to all the departments of philosophy. In fact, philosophy is concerned precisely with such ultimates in every context. It investigates the ultimate nature of being, of knowledge, of the moral standard, of values in general, and so on. Thus, in this broad sense, metaphysics is identifiable with philosophy in general.*

9. Philosophy and logic

In the fullest sense of the word 'philosophy', logic (deductive and inductive) is part and parcel of philosophy. It forms part of methodology which is an important branch of philosophy. But if philosophy is taken less widely to mean an inquiry concerning realities and values apart from methodological interests, then logic may be distinguished from philosophy as a formal inquiry about thought. In that case logic becomes a science—the science of the regulative principles of thinking or acquiring knowledge. In fact, the tendency is to call logic a science in view of its limited field and rational rigour of investigation. (cf. Montague, *Ways Knowing*).

There is, however, a field of study which has recently been distinguished and given the name, 'philosophical logic'. In it philosophers ask some fundamental questions about the nature, source and justification of the principles of logic, and provide an elucidation of such related notions as those of proposition, truth, etc. When, for example, a philosopher inquires about the nature of implication or the meaning of truth, or asks whether the 'principle of induction' can be proved or disproved, his questions are in the area of philosophical logic. It is supposed to be a branch of philosophy, rather than of logic, and is alternatively called 'the philosophy of logic.'[7]

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* There are also two secondary or derivative meanings: (a) Anything concerned with the supraphysical, such as 'metaphysical healing' or 'metaphysical poetry' etc. and (b) any scheme of explanation which transcends the inadequacies or inaccuracies of ordinary thought. (D.D. Runes : *Dictionary*)

10. Philosophy and Theology

(a) The word 'theology' derives from a combination of the Greek words, 'theos' which means God and 'logos' which means science. Obviously, therefore, *any* inquiry about God or other related problems may be called theology.

Theology, in this sense, is divided into natural or rational theology and revealed theology. The former is a rational inquiry about God, controlled by no religious authority. This is part of a branch of philosophy known as the Philosophy of Religion. This is, in fact, no other than the 'philosophy' of God.

(b) On the contrary, revealed theology is discussion about God under the authority of religion. But, usually, it includes other problems of religion besides the problem of God. Further, it may be a general study of all revealed religions or a limited study of a particualr religion. In the latter case, it is a theoretic expostion of the dogmas of a particular religion such as Christianity or Islam—a systematic discussion about such problems as God, relation between God and His creation, after-life, heaven and hell, etc. within a limitation prescribed by the ideas and experiences of that religion. Hence arises Christian theology, Muslim theology, Hindu theology, and so on.

This last is the most usual sense of the word 'theology'. In this sense, theology is neither a part of philosophy, nor is identical with it in nature. It is called a 'science' of religion, in view of its limited scope and systematic procedure. But it is obviously not a science in the strict sense, because it is based on authority. It is essentially different from philosophy in spirit and method. It makes reason subservient to dogma, while in philosophy reason is supreme. But philosophy and theology (in its general or specific form) may and do affect and help each other. Theology, by systematizing the basic principles of religion, aids in their philosophical interpretation and evaluation. On the other hand, philosophy may strengthen religious principles by clarifying and rationalising them, i.e., purging them of grossly irrational elements.*

11. Philosophy, Language and Linguistics

Since philosophy works with ideas and ideas are expressed almost solely by means of words, language is naturally a primary concern of philosophers. In fact, language is of fundamental importance not only in our ordinary life or in literature and poetry, but in any field of inquiry. It

* On this point, see also (a) the relation between philosophy and religion, and (b) the relation between theology and philosophy of religion, Chapter XXIV.

is, however, of very special importance to philosophy for several reasons. First, while one of the main aims of philosophy is to make our ideas clear, and while it tries to state its theories in clear terms, the words of ordinary language are usually more or less vague. Secondly, words are sometimes equivocal or ambiguously used, and such equivocation or ambiguity is very likely to breed misunderstanding or controversy. Finally, it is important for us to have a clear idea about the functions of language, about the distinct spheres of these functions, and also about when or how an expression dupes us by seeming to have one kind of meaning while it really has meaning of some other kind, or pretends to be meaningful while it is really meaningless. Failing to do this may result in misjudgment of facts, invalid reasoning, or in false philosophical theories. "The failure to consider language explicitly," says Russell, "has been a cause of much that was bad in traditional philosophy."[8] And Wittgenstein, who virtually limits philosophy to a concern with language, remarks : "Philosophy is a battle against the bewitchment of our intelligence by means of language."[9]

Philosophy's concern with language leads to its concern with linguistics. Linguistics is commonly defined as 'the science of language' and has several parts, such as syntax, semantics, phonology, etc. It is an empirical study of language in general or of a particular language. It asks questions about words and their elements, about sentential structure, about meaning and the nature and types of relation between language and reality. But just as there is ontology or metaphysics corresponding to the empirical science concerning nature, or the philosophy of mind corresponding to the psychological studies of mental phenomena, so also there is 'the philosophy of language' corresponding to the empirical science of linguistics. Again, just as a metaphysician, for example, cannot simply ignore scientific data in his search for the ultimate nature and constituents of the world, so also a philosopher of language cannot be utterly blind to the findings of the linguist. Linguistic data, including both facts and theories, are the material on which the philosopher of language works from his peculiar critical point of view, and seeks to arrive at some more ultimate truths about the general nature of language and its relation to thought and reality. In a sense, therefore, while linguistics provides a foundation for the philosophy of language, the latter aims at giving a sort of finality to the former's work.

Mainly, linguistics and philosophy converge on syntax and semantics. Parallel to the linguist's analytic description of syntax and semantics we have 'logical syntax' and 'philosophical semantics', and these are important tools for a philosopher in his traditional fields of inquiry, ontological or otherwise. Besides, a new branch of philosophy (rather a

new style of philosophizing) has come to be known as 'linguistic philosophy' because, according to its practitioners, it is only through a consideration of features of language that philosophical problems can be fruitfully approached or solved, or even properly formulated.*

* For some rudiments of the Philosophy of Language see Appendix A : 'Language and Meaning'.

CHAPTER III

IS PHILOSOPHY WORTH WHILE ?

1. The problem

Any pursuit or performance is considered worthless either because it is irrelevant to the interests of our life, or because its purpose is incapable of fulfilment, or both. Philosophy has been attacked from both of these standpoints. Firstly, it is alleged that, while the sciences are making life secure and comfortable through a fast-expanding mastery over natural forces, philosophy is still in its wild-goose chase after stale academic questions. Secondly, throughout ages, philosophy has merely raised numberless questions without being able to answer any. But a careful consideration will show that these allegations do not stand; or even if they stand, they do not make philosophy worthless.[1]

2. Philosophy intimately related to Life

Philosophy is widely misconceived as a pursuit which has no relation to life, but rather makes a man unpractical and fanciful. But, in fact (as we have seen), philosophy has very intimate relations to man's life.

(a) First of all, philosophy is not merely concerned with questions of purely theoretic interest. Some of its branches, such as Axiology, the Philosophy of Religion, and Ethics, are clearly concerned with problems of practical life. Axiology deals with values, the philosophy of religion evaluates our religious ideas, and ethics seeks to define the criterion of moral action. And above all, the philosophy of life undertakes a comprehensive inquiry concerning the nature, and the goal or goals of human life, and suggests the best means to their attainment. Many times in the history of philosophy its practical interest has prevailed over its theoretic enterprise.

(b) Even if philosophy be a purely academic discipline, we cannot deny its relations to life, unless it is shown that (i) philosophical theories have no bearing upon action, or (ii) that the general end or ideal of life thoroughly excludes independent intellectual satisfaction. But neither is probably the case. First, our theories about reality largely determine our view of life and

practical attitude. Without a theoretic basis, our view of life remains insecure and may crumble as soon as the mind becomes critical. The ultimate problems about reality may themselves remain finally unsolved; yet some sort of word-view within the limits of the best of our thought and experience we must have as a basis of our philosophy of life.

Secondly, it seems wrong to maintain that intellectual satisfaction is not itself a goal of human life. To some at least, it is rather the highest goal—the Highest Good. It must be noted that the term 'practical' is relative, and many of our most favourite pursuits are in fact of little practical value in the narrow sense. If by life we mean merely a vigorous and material type of existence, where the belly alone counts, then many of our interests at once fall to the ground. Painting, poetry and even much of gastronomy and textiles, lose their utility. But actually we have them all as our very distinction from the lower categories of beings. Much of what we need or desire most is merely a matter of joy; and philosophical wisdom may at least be one of the highest kinds of joy. Philosophy cannot be condemned as useless or unpractical unless those other pursuits are similarly treated.[2]

(c) Moreover, philosophy as an intellectual discipline naturally has tremendous bearing upon life. Life demands right action and right action presupposes right thinking.[3] The logical temperament, wide outlook and healthy mentality which grow in the soil of philosophical gymnastics are possibly the need of every moment, in our personal as well as social life. Religious, cultural and the other traditions have divided men into countless groups, and history has recorded enough bloodshed over petty disputes. Only free and critical thought can keep these groups together in an atmosphere of amity and understanding.*

3. Nor is philosophy impossible

Not only is the goal of philosophy intimately related to life, but the goal is also not absolutely unattainable. There is a general allegation that the field of philosophy is too vast and too ambitious for man's limited intellectual powers. It is the search for a black cat in a dark room where the cat is not. The history of philosophy is one of hot but unsettled controversies and besetting contradictions, showing little signs of progress. Apart from these discrete charges, there are organised challenges technically known as scepticism, positivism and agnosticism. The sceptic denies the possibility of *certain* knowledge; and while the agnostic regards metaphysics as impossible, the positivist calls it nonsensical. But none of

* See also Section 7 of Chapter II.

these allegations is sufficiently justified, and we are at most in a state of doubt. But doubt, like a defect, is only a source of further incentive to the truly human spirit. "We fall to rise, are baffled to fight better."

Besides, it is probably wrong to deny real progress in the history of philosophy. A comparison of any modern system of philosophy with Plato's doctrine of Ideas, not to speak of the 'water philosophy' of Thales, will sufficiently prove this. Apart from systems, progress in the case of individual issues has been wonderfully great. The issues have been sharpened, concepts clarified, fallacies discovered and removed, new vistas of exploration revealed with unexpected promise. Even where our departure from common sense ends in a return to the same, the gain is not negligible. Our views as they pass through a critical examination, become less vague and more convincing.[4]

4. Utility of philosophy

(a) Philosophy has some great uses in the theoretic as well as in the practical sphere. In the theoretic sphere, philosophy tries to give fullness and finality to our knowledge by examining the fundamental scientific concepts and synthesizing the relatively unconnected findings of different sciences. As it is said, while science discovers, philosophy interprets; and while science gives only partially synthesized, philosophy gives fully synthesized knowledge.

(b) Historically, from time to time philosophy has suggested directions of scientific inquiry, which has resulted in revolutionary discoveries and wonderful advancements.

(c) In the practical sphere, philosophy, through its metaphysical and moral theories, inspires the soul and keeps alive the necessary incentive to struggle and progress. Without a critical basis, man's vision would remain unclear, and man's physical and mental energy would be misused or wasted for want of appropriate channelisation.

(d) A training in philosophy sharpens man's intellect, develops a power of grasping issues and analysing concepts, and grows a habit of critical thinking and sober judgment. It renders man free from prejudices and superstitions, redeems him from narrowness, and makes him tolerant and liberal.

(e) Philosophy has no dogmatic hatred of traditions and orthodox faiths. Its aim is to purge them of whatever is utterly illogical and pernicious in them. It seeks to bring about a harmony in the midst of their differences and thereby guard man against misunderstanding and harmful strifes.

NOTES

1. Some Descriptions of Philosophy

Philosophy is love of Wisdom

"Pythagoras", says Diogenes Laertius, "was the first person who invented the term philosophy and called himself a philosopher...." Previous to him, philosophical knowledge would be called 'wisdom' and the philosophers wise men. The term 'philosophy' literally means love of wisdom. But love generally implies a pursuit—a pursuit of the object of love. Thus philosophy may as well be called 'pursuit of wisdom'. But philosophy has in fact been both pursuit of wisdom (philosophizing) and the wisdom pursued.

What, however, is wisdom? Popularly, by wisdom is meant prudence, practical sagacity or the ability to make a right use of knowledge, or right judgment. But as an object of the philosopher's love, it is a bit different. It is, in Plato's words, 'the vision of truth—nay, of the whole truth'. A philosopher is one who has a taste for every sort of knowledge and is curious to learn and is never satisfied'. (*Republic*, Bk. V) According to Aristotle, wisdom is 'knowledge about certain principles and causes'— that is, knowledge about the ultimate grounds or principles of things. It differs from ordinary experience or even from art in being theoretic and not necessarily productive. Boiled down, wisdom is verified knowledge about the ultimate source and nature of things.

But this is not all. Wisdom is not mere knowledge or accumulation of facts; it is its 'distillation' "It is like honey, every drop of which is the result of many trips to many flowers. And, like honey, it finds its function in furnishing sustenance to life" (D. Drake). It is, in brief, the intellectual good taste or the general power of taking things in their true light and appreciating the relative merits of man's divergent interests so as to determine the direction of man's highest good, acquired through a scientific knowledge of the ultimate nature of beings at large.

This definition of wisdom is consonant with Diogenes's account of the age-old conception of wise men as 'endowed with great acuteness and accuracy of mind', and is representative of the two important points of distinction between philosophy and science. Wisdom is to be attained not through a knowledge of any particular sphere of facts (which is science) but of facts generally; and while science merely accumulates facts and discovers their laws, philosophy concerns itself with their *evaluation*, particularly with the evaluation of those aspects of human experience which are commonly known as 'values' This represents also the general distinction between philosophers and the common run of people as to their attitude towards knowledge. Most minds, in the words of Mead, "are ready to rest when they have accumulated sufficient knowledge to meet the

practical demands of daily living or to permit them to feel that they have at least some insight into the meaning of human experience. The philosopher however is not satisfied with such a modest goal".[5]

Philosophy is a criticism of life

It is only natural that philosophy, being a human pursuit, is intimately concerned with the problems of man's life. Philosophy thus comes to be a criticism or interpretation of life, in either of the two ways.

(a) First, a view of the world at large directly or indirectly affects man's life, because man is part and parcel of the world. The idealists are quite right in maintaining that any genuine world-view must take special note of the distinctive features of human life and experience.

(b) Secondly, philosophy is interested in certain specific problems of life of an ultimate character. Human life is marked by a distinctive struggle towards the realisation of 'values'— truth, goodness, beauty, etc. An examination of such ideals, of their nature and relative merits, their place in reality and relation to other mundane or biological pursuits is of eternal interest to man, because he does not live by bread alone. Interest in this examination of values is one of the ways in which philosophy is a complement of science. But this consideration of values is virtually an inquiry about the nature, source, meaning and destiny of man's being— in brief, an interpretation of man's life. Whatever the direct object of the philosopher's speculation, an understanding of his own life, consciously or unconsciously, lies in its very core. He philosophizes because he wishes not only to live best but to live meaningfully.

Philosophy is an interpretation of experience

Probably, philosophy can most appropriately be described as an interpretation of experience. Experience, internal or external, is the very natural basis of our curiosity or hunger for knowledge; and every intellectual pursuit is, immediately or ultimately, an attempt at the explanation of the stock of experience at our disposal. Experience is thus at once the starting point and subject-matter of philosophy, and the whole philosophical inquiry may be put in the form of a single question: 'What is experience all about?' Rightly understood, this question "sums up all the other problems and issues with which philosophy deals". (Mead).

This may be elucidated by one or more illustrations. Our question about the ultimate reality is, on analysis, an attempt to explain our experiences relating to the internal or external world. 'What is the ultimate nature of the world?' is only another form of 'What is the ultimate ground of our experience?' or, 'Is our experince experience of the very reality or merely of its appearances?' Our questions about the soul are obviously questions abqut the experiences of our inner states and processes. The words— world' 'soul', 'cause', reality' God' etc.—stand for hypotheses

formed in order to explain experience, rather than objects whose nature we directly seek to know. Philosophy as an explanantion of experience is thus a more appropriate description than as an inquiry about any 'object' such as the world, the soul and so forth. Strictly speaking, these 'objects' are hyptheses or presuppositons—constructions of mind, applied to different spheres of experience as tools of our thought and speech.

Philosophy is a No-Man's Land between Science and Theology

A no-man's land is a narrow tract between two or more territories, which is in neither's exclusive possession. Bertrand Russell finds philosophy comparable to such a tract. The no man's land of philosophy stands between the areas of science and theology. Philosophy is something intermediary between these two. The questions of philosophy—questions about the ultimate reality, about God, human soul, virtue, immortality, etc. —are such as science cannot immediately answer in its laboratory, nor is it interested in them. Theology, on the contrary, is interested in them; but its answers, being based on authority, are unsatisfactory. Philosophy studies these questions by the method of science which is the only satisfactory method. Philosophy thus is a sort of synthesis of science and theology. (Vide—Russell's *History of Western Philosophy*, p.10). It must not, howerver, be forgotten (i) that the scope of philosophy is actually wider than that of theology, and (ii) that we have already taken the term 'theology' in a special sense.

2. Who is a philosopher?

As we have already noted (Chap. I, Sec. 2), although, in a sense, all human beings are philosophers, there is another sense in which even a person, otherwise highly learned and thoughtful, is not necessarily a philosopher. Russell observes that to understand a philosophy of an age or a nation "we must ourselves in some degree be philosophers".[6] This is no doubt true, but the custom is to take a more rigid view of what it is to be a philosopher. Various types of individuals are there in the field of philosophy: students, teachers, casual or somewhat serious readers of philosophical works, and historical and other authors. But, on the customary conservative view, none of them is a philosopher unless he philosophizes in the true sense of the term. Mere reading of philosophical works or understanding someone else's ideas is not enough. Anybody philosophizes if and only if:

(a) He is imbued with philosophical curiosity and interest, is able to ask philosophical questions and to offer, usually after some hard thinking, at least some plausible answers to them. Or—

(b) Even if he has no initial questions of his own, he is able to understand, criticise and evaluate others' philosophical ideas and opinions, asking pertinent and enlightening philosophical questions during the process.

It has been said that in philosophy the questions are more important than their answers, that philosophizing is essentially a matter of asking the questions. We can at least say that the questions are of equal importance.

It may, however, be noted that a philosopher is expected not merely to have a certain intellectual dispositon and logical competence but also to possess a certain sort of character. He is a lover of truth, and love of truth is believed to entail love of justice and honesty, i.e., honesty in the practical as well as the theoretical sphere. "To be a philosopher," as H.D. Thoreau said, "is not merely to have subtle thoughts, nor even to found a school, but so to love wisdom as to live, according to its dictates, a life of simplicity, independence, magnanimity, and trust."[7] Now, all this seems quite natural and may also be quite true. But, as it appears, the question whether there is any *necessary* (logical, and not merely psychological) connection between a philosopher's intellectual and moral dispositon should better be left open.

3. How to study Philosophy

Philosophy may roughly be divided into two broad areas, one of which is 'popular philosophy' while the other may be called 'academic philosophy'. Popular philosophy consists of ideas and beliefs about creation, the purpose of human life, God, Soul, after-life, etc., which are derived mainly from common sense and religious traditions. Academic philosophy, on the contrary, is an analytic and critical inquiry and is practically a concern of specialists. Works on popular philosophy, which are almost wholly descriptive, may be attractive to many and are rather easy to understand. Academic philosophy demands a special sort of interest and acumen, and a higher degree of attention and steadfastness. Philosophy, as we say, is love of wisdom, and love is perhaps the best response to this requirement.

The study of philosophy may be approached either historically or problemwise. Both approaches are useful, but the most useful approach seems to be a synthesis of the two. The historical approach provides a clue to the social conditions or the private situations in which a particular philosophical theory has developed and an insight as to whether 'philosophical neutrality' has been vitiated by any internal motive or external force. The students' real purpose, however, is neither psychological nor sociological but to understand the problems and to comprehend and (if possible) evaluate the solutions offered. Conflicting solutions presented in philosophical works may easily confuse the beginners or even dishearten them. The remedy lies in being really interested in the problems, in feeling them as their own and not imposed from outside. This conditon being fulfilled, the students may start enjoying the excitement of asking the questions and undertanding the real source of

the diversity of opinions.

Many statements in a philosophical work are, as a rule, clear and straightforward. Passages which contain analysis and argument may at times seem dificult, and we may not be able to read them as we would read, for example, the pages of a novel. Just as we have to exercise our imagination if we are to understand a good piece of poetry, so also must we exercise our intellect, at least to some extent, if we are to attain glimpses of a profound thought.

3. Some definitions of Philosophy

(1) 'Philosophy aims at the knowledge of the eternal, of the essential nature of things.' (Plato)

(2) 'Philosophy is the science which investigates the nature of Being as it is in itself, and the attributes which belong to it in virture of its own nature.'

'Philosophy is the science of the first Principles.' (Aristotle)

These definitions, roughly, identify philosophy with ontology.

(3) 'Philosophy is the science and criticism of cognition.' (Kant)

(4) 'Philosophy is the science of knowledge.' (Fichte)

These definitions identify philosophy with epistemology.

(5) 'Philosophy is the science of all sciences'. (Comte)

(6) 'Philosophy is the sum-total of all scientific knowledge.' (Paulsen)

(7) 'Philosophy is the universal science which has to unite the cognitions attained by particular sciences into a consistent system.' (Wundt)

(8) 'Knowledge of the lowest kind is ununified knowledge, science is partially unified knowledge, and philosophy is completely unified knowledge, the generalisations of philosophy comprehending and consolidating the widest generalisations of science.' (Herbert Spencer)

These difinitions treat philosophy as a kind of super-science which unifies the special sciences.

(9) 'Philosophy is the science of the universe not in its particular details, but in respect of the principles which condition all its particualrs.' (Uberweg)

(10) 'Philosophy is such knowledge of those things which are or happen, as will enable us to understand why they are or happen.' (Wolff)

(11) 'Philosophy is the science of the absolute idea.' (Hegel)

These are only a few of the many definitions of philosophy. Considered in the light of our exposition of the nature and scope of philosophy, none of these is fully satisfactory.

PART II

METHODOLOGY

CHAPTER IV

METHODS OF INQUIRY

1. The problem stated

As we have already seen (Chap. I, Sec.5) methodology in a restricted sense is a study of the methods of science and philosophy. There are more than one such methods, and they fall under two broad categories.Those which come first to the ordinary view are naturally "the methods of investigaton," such as deduction and induction. But there are also two other methods which may be called "the methods of approach." This is because the question regarding method has two aspects. Our first inquiry is: Should we proceed from an uncritical acceptance of certain beliefs and principles more or less generally recognised as true, and without a prior examination of our faculty or faculties of knowledge? Certain ideas about the nature of things are current among us as obviously true or apparently infallible. We may accept them as such and build up our scientific or philosophical views upon that foundation. Or, we may accept nothing without criticism, lest truth escapes our notice; we may even question the very possibility of 'certain' knowledge. Our faculties of knowledge may, on examination, turn out to be incapable of dealing with our subtle problems. We may approach our problems either way, and accordingly we have two methods of approach—Dogmatism and Criticism.

Dogmatism is repugnant to the spirit of science and even more so to the spirit of philosophy. Our choice therefore falls to the critical method. And hence our next inquiry is: Just how to begin and carry out the investigation? How to attack the problems? What methods shall we adopt for collecting data, and how to interpret them? Is sense, reason or intuiton, or each of them a source of knowledge? What is the criterion of truth? What are the forms of deductive, inductive or other types of reasoning used in the search for truth? Such are the questions regarding the methods of investigation and, directly or indirectly, these are dealt with in two branches of philosophy, viz., logic and epistemology.

In this chapter we shall first consider the methods of approach, and

then take a bird's-eye view of some methods of investigation.*

2. Dogmatism

Dogmatism is the method of approaching philosophical problems without a previous criticism of our faculties of knowledge. As Caird puts it: Dogmatism is the attitude of that mind "which is as yet troubled by no scruples as to its own competence, as to the efficiency of the methods and principles it uses." It is that approach in which the thinker enters straight into the central problems of philosophy— the problems as to the ultimate nature of things—without a prior inquiry about the sources, conditions and limits of knowledge. It does not ask how we know and how far we can know, but either overlooks such questions or accepts their readymade answers.

A dogmatic system, therefore, (a) does not properly ascertain the possibility and limits of certain knowledge, but (b) builds itself upon an uncritical recogniton of some principles and conceptions as self-evident. Dogmatism, in other words, is a proof based on unproof. It may be of two forms. It may presume the possibility of knowledge and serve as the basis of a philosophical system, or it may deny the possibility and lead the mind away from philosophy.

The history of dogmatism is as old as philosophy. Ancient philosophy is more or less vitiated by dogmatism, because the natural inclination of the mind is to jump into activity without examining itself beforehand. Self-criticism and even self-consciousness, are traits of a developed mind. But it will be wrong to say that methodology is altogether lacking in ancient philosophy. Long ago, in the 4th century B.C., the Greek philosopher Parmenides distinguished between sense and reason and credited the knowledge of reality to the latter. Even earlier, in India, methodological speculations found a considerable place. Yet such speculations of old times were more or less loose, unsystematic, random, insufficient and, in a word, unsatisfactory. Medieval philosophy is full of dogmatic elements. It is Kant, a German philosopher of the 18th century, who makes the first vigorous attempt to free philosophy from the clutches of dogmatism.

3. Criticism

Criticism or the critical method is just the reverse of dogmatism. Its basic dictum is that epistemology must precede metaphysics. Before commencing a flight a pilot must ascertain if the engines of his airship are

* This naming of the methods is unimportant, except as a guard against confusion. It may, however, be noted that although the methods of investigation are evidently the actual methods of inquiry, those of approach are of equal importance.

in right order in every respect. Similarly, before taking up the central philosophical problems, one must see if philosophical knowledge or indeed knowledge of any kind is at all possible, or whether the problems in hand are at all soluble.

The critical attitude is the very essence of philosophy. Hence it is more or less present in the philosophy of all ages. Methodological considerations to a certain extent characterise even the thought of ancient India and Greece. But methodolgoy as a fullfledged science is of modern origin. In Kant's well-known work, *Critique of Pure Reason*, it assumes a highly developed form. But modern methodology may be said to have germinated even much earlier. Bacon (1561-1626), the great harbinger of modern science and philosophy, sought to demolish all idols of prejudice and preconception. And Rene Descartes (1596-1650), the very father of modern philosophy, thoroughly applied his cudgel of doubt against many ideas and beliefs generally accepted as indubitable.* In Locke's *An Essay Concerning Human Understanding* (1690), we have the first elaborate treatment of the problems of knowledge.

The distinctive feature of modern philosophy is its anti-authoritarian, critical temper. Particularly from the time of Kant, methodological interests have been predominant in modern thought. Methodological investigation is essentially analytic, and thus modern methodology forms a large part of the 'analytic philosophy' of many recent and contemporary thinkers. Locke (1632-1704), Berkeley (1685-1753), Hume (1711-76) and Kant of the modern period and such contemporary philosophers as Moore, Russell, Ayer and Wittgenstein have made classic contributions in the field of methodology.

4. Evaluation of dogmatism and criticism

(a) Between dogmatism and criticism, the latter is obviously preferable. Criticism, said Kant, 'is the necessary preparation for a thoroughly scientific system of metaphysics.'[1] Since philosophy is a search for indubitable truth, its approach cannot be dogmatic. It is here that philosophy differs basically from common sense and the special sciences. The methodological interest is not only a unique feature but a special prerogative of philosophy.

(b) But it is alleged that too much of methodology has certain undesirable consequences. First, it tends to reduce the thinker's interest in the central problems of philosophy and to invite more and more of subjectivism. Secondly, the inherent technicalities of methodology which

* See the section on the Method of Doubt.

demand a special background of knowledge in the general reader, may naturally incur his reluctance to philosophy.

(c) Modern realists have taken to epistemological thinking mainly in order to counteract subjectivism. They generally do not regard epistemology as a necessary prelude to metaphysics. They assert that 'the nature of things is not to be sought primarily in the nature of knowledge,' and demand an emancipation of metaphysics from methodology.

(d) But this demand is not justified. If methodological inquiry can show that the philosophical questions, or at least some of them, cannot be answered by our imperfect faculties of knowledge, much of our invaluable time and energy is saved. If, on the contrary, it shows that knowledge is possible and suggests the approprate methods of investigation, it takes us a long way towards fulfilment. At any rate, methodology is the indispensable gate-way to philosophy proper. 'We cannot get anywhere in philosophy without the epistemological problem rearing its head, and when we attempt to scotch the serpent with the beginner's neat little formula, the serpent refuses to be impressed.'

5. Kant's theory of methods

Kant spoke of three philosophical methods—dogmatism, scepticism and criticism. The first two are the methods of his predecessors, while the third one is his own. By dogmatism in metaphysics he understands the general confidence in its principles without a previous criticism of the faculty of reason itself, merely on account of its success; and by scepticism, the general diffidence in reason which we entertain without previous criticism, merely on account of the failure of its assertions. Thus, both dogmatism and scepticism are really dogmatic, beacuse they lack a proper theory of knowledge and assert something arbitrarily. The only difference between them is that while dogmatism expresses confidence, scepticism expresses diffidence in the powers of reason.

Dogmatism is the presumption that reason, working in accordance with its own principles, can know *a priori*, without first inquiring in what way and by what right reason has come into the possession of these principles. "Dogmatism", says Kant, "is thus the dogmatic procedure of pure reason without previous criticism of its own powers."[2] Scepticism, on the contrary, does away with metaphysics without an adequate examination of the powers of reason. Criticism is opposed to both of these procedures. It undertakes 'a thorough investigation of the rights of speculative reason', before passing on to metaphysics.

It must be observed that Kant does not mean by dogmatism a lack of

any sort of methodology, but methodology of the type he himself introduces. It is, therefore, that he regards all philosophy before him as dogmatic. But this is not quite justified. There may be dogmatic elements in the preceding systems, but they cannot be said to be quite uncritical in their 'attitude.'

[Kant uses the words, 'dogmatism' and 'criticism', in special senses different from ours. His use of the word 'scepticism' is confusing, since scepticism is also shown to be dogmatic. Sometimes, following him, a mention is made of dogmatism, scepticism and criticism as three methods of philosophy. **Descartes'** rationalism is produced as an instance of dogmatism and **Hume's** position, of scepticism. But neither is **Descartes** thoroughly dogmatic, at least in his general 'approach', nor is **Hume's** scepticism a method but rather the *result* of a certain method, viz. empiricism (Kant would say, dogmatic empiricism). **Descartes'** method of doubt is not an instance of scepticism (there are, of course, different senses of the word, 'scepticism').

By criticism we have understood approaching metaphysics through methodology. If so, **Kant** is not the first or only critical thinker, though he may be the most systematic one. Moreover, rationalism and empiricism are presented as two forms of dogmatism. But this is inconsistent with our definition of dogmatism -probably, with any reasonable definition.]

6. The subject-matter of Logic and Epistemology

Logic and epistemology, as we have seen, study the methods of investigation. On the question of the nature of these methods, philosophers are broadly divided into two schools: intellectualists and intuitionists. The intuitionists contend that the ultimate nature of things can be known by a direct communion in which our intellect has no place. On the contrary, the intellectualists maintain that 'certain' knowledge is possible only by a right exercise of our intellect, i.e., our faculty of thinking which involves both sense and reason. Logic is the indispensable instrument of the intellectualists. Intellectual knowledge is knowledge attained by thinking and thought works by judgment and inference. Logic considers the formal aspects of judgment and inference, while epistemology considers the sources of judgment and the material conditions of the truth or validity of judgment and inference. Thus logic may be said to study the form, while epistemology the matter of knowledge.

Logic is a formal, while epistemology is a material science. Logic inquires how we should think so that our thought can be valid, i.e., free from internal inconsistencies. Accordingly, it studies the nature and structure of judgment and inference and also some other subsidiary processes, such as definition, division, classification, and so on. Epistemology, on the contrary, raises some more ultimate questions. It asks about the sources of our ideas, the criterion of truth and the ultimate limits of knowledge. In other words, while logic investigates the *formal* truth or

validity of knowledge, epistemology investigates the *material* truth of knowledge.

Both logic and epistemology are normative sciences. Both are evaluative, but whereas logic studies the norms of the form of thought, epistemology studies the norms of the matter of thought. Roughly speaking, logic is concerned with the process, epistemology with the product of thinking. Logic will see if there is any error in our very process or manner of thinking; epistemology will determine whether the contents of thought have any objective source and are in agreement with the facts, i.e., actual states of affairs.

7. Deduction and induction

Although logic is interested in all types of thinking, its central interest lies in inference or reasoning. In fact, reasoning is involved in every instance of complete knowledge. Whatever judgment we may make or whaterver belief we may entertain, there is no real knowledge until we have sufficient proof or evidence in its favour. It is therefore that logic is also called the science of the weight of evidence. Reasoning is fundamentally of two types: Deduction and Induction. But in each we pass from a premise (i.e., one or more judgments given) to a conclusion. Logical principles will guide us in determining whether the given premise is or is not a sufficient ground for accepting the conclusion.

The premise may be *a priori* or taken from experience. But that is a concern of epistemology, not of logic. Epistemology will see whether a premise or judgment is *a priori* or empirical, or how to validate such a premise or judgment. Logic, on the contrary, is interested only in the formal properties of a premise, and will consider whether the passage from the premise to the conclusion is justified.

In deduction the premise is taken for granted and a certain conclusion is drawn out, which can never be wider in scope than the premise. The inference is *immediate* when the premise consists of one judgment. *mediate* when more. Syllogism is the most important type of mediate inference. In induction, the premise is taken from the particular facts of experience, and the conclusion, being universal, is always wider than the premise. While in deduction we pass from equal to equal, or from more to less, in induction we go upwards from less to more. This passage from less to more, from known to unknown, is called the inductive *leap* or hazard of induction. This leap is the very heart of induction, and it is justified by our belief in the law of uniformity of nature and the law of causality.

8. The formal nature of Deduction and Induction

Both in deduction and induction logic is, strictly speaking, formal. In both we are not interseted in the material truth of the premise, but look for those structural features which the premise must have, or the formal conditions which it must fulfil, in order to justify the conclusion. In induction our materials of the premise are taken from the facts of observation, but the principles it lays down relate to the form or structure of the reasoning. The well-known experimental methods of scientific induction are only different 'forms' of induction, showing the structure which an argument must have in order that the inductive leap is justified.

Of course, all these formal principles are applied in science to attain material truth. But they cannot give us material truth by themselves, but only if in each case the premises themselves are materially true. In deduction, the conclusion is materially true, provided the premise is either a self-evident truth or a particular fact of experience, or is something furnished by a correct induction. The material truth of a correct induction depends on two conditions. First, the particular empirical elements of the premise must be facts. Secondly, the elements must be causally related and governed by the general law of uniformity. If no causal relations are shown or if the laws of causality and uniformity are doubted, the whole body of inductive generalisations crumbles to the dust or becomes only a matter of probability.

But the task of determining the nature of facts and assessing the objectivity of the laws of causality and uniformity belongs to epistemology or metaphysics, not to logic. It is in this sense that logic is formal. While epistemology deals with the more ultimate conditions of certain knowledge or determines the grounds of justified belief, logic determines only the formal principles of valid thinking. Because logic is systematic and selective in scope, it is usually and appropriately called a science.

9. Dialectic

Dialectic is another method of logic, that is, another way in which thought operates in order to attain knowledge. Literally, dialectic means discourse—the art of reasoning or argumentation. But usually it denotes a special type of reasoning. It is that art of discourse or reasoning in which reason proceeds by finding out contradictions in what is already posited and by either discarding the contradictory ideas or reconciling them under a higher synthesis. This method has been given different forms and applied for different purposes. It has, however, two general forms: **negative dialectic** and **positive dialectic.**

10. Negative Dialectic : Antinomy and the 'Socratic Method'

Negative dialectic, in its general form, is a method of examining concepts and priciples in order to clarify their meaning and assess their strength and weakness. But it may have a more difinite purpose of refuting a *doctrine* through a critical analysis and is therefore called *analytic* or *destructive*. Its purpose is more to negate than to posit something. It is therefore negative. But in negating something its opposite is automatically posited. Hence, in a way, the method is positive as well.

Negative dialectic, again, may be said to have two forms. In one form, it is called 'antinomy'. By an antinomy we understand "the mutual contradiction of two principles or inferences resting on premises of equal validity." As an argument, an antinomy is a "proof that, since two contradictory propositions equally follow from a given assumption, that assumption must be false.[3] Zeno is said to be the inventor of this sort of dialectic which he applied to demonstrate the unreality of change and multiplicity. Later on Kant applied the same in the 'Transcendental Dialectic' of his first *Critique* (1781), in his devastating antinomies of pure reason. He showed that our ideas of pure reason—world, mind and God—which relate to a sphere that transcends experience, are such that contrary conclusions follow equally from them. Hence the ideas themselves are purely speculative.

In the other form, negative dialectic proceeds gradually in a question and answer manner, unmasking at each stage the latent inconsistencies or fallacies in the thought under consideration, and simultaneously developing the idea in the mind of the arguer. This conversational form of dialectic is a development from Zeno's Method, introduced by Socrates. So widely was it used by Socrates himself that it has come to be called the 'Socratic Method'.

Socrates would not attack his opponent straightway; he would put questions to him and press out their answers. By conversation he would make him analyse his position, see for himself its inherent fallacies, and finally reject the same as faulty. But in so rejecting, obviously, Socrates's own view came to be accepted.* This question and answer method has been applied extensively by his pupil Plato and later on by Berkeley and Hume. The peculiarity of their use is that they presented their reasoning in written dialogues having a number of participants.

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* This method of indirect proof, also called proof by *reductio ad absurdum* (reduction to absurdity) is practised by lawyers and geometricians.

11. Positive Dialectic

Positive dialectic, unlike its negative counterpart, is a method of 'reconciliation'. It consists in the gradual development of thought through a reconciliation of contradictions. The essence of the method is Socratic: but it has been historically associated with the great German idealist, Hegel (1770-1831), for two reasons. First, Hegel uses the Socratic dialectic, not merely for refutation, but for the positive purpose of building up a metaphysical system. Secondly, the older method assumes in him a peculiar form and receives a detailed exposition.

Hegel's dialectic is a triadic movement of thought, each stage of which is a synthesis of opposites. The Aristotelion logic rests upon the axiom that contradictions can never meet. That is, if two propositons contradict each other, both cannot be true or false at the same time. It is on this basis that Kant denied the possibility of metaphysics, because he saw that any step beyond experience ends in contradictions. Hegel, on the contrary, insists that our reason, in fact, functions by reconciling opoposites, without leaving them apart. The attainment of truth is a process of gradual progression through reconciliation of opposites until a final synthesis is reached.

Just as a part of a whole suggests the other part, and, through that, the whole itself; similarly, a part of a truth suggests the other part and, thereby, the whole of the truth. If this whole is only a part of a larger whole, we have another similar movement of thought. Now, no part as such is fully real, and no part-truth itself is fully true. If we start with a fragment, we shall be proceeding towards the whole only gradually. Each step will be a development upon the last, in being a reconciliation of its apparent opposites. That which we start with is the *thesis*, that which it suggests as its opposite is the *antithesis*; and that in which the two are reconciled is the *synthesis*. The thesis, antithesis and synthesis together constitute a *triad*. This method is known as 'the Hegelian Dialectic' because of the outstanding application that Hegel makes of it, although its model is taken by him from his immediate predecessor, Fichte.

According to Hegel, thought, in its search for truth, moves only in this triadic manner. Knowledge of the reality does not come from experience but from reason which works dialectically. It is a gradual but continuous process of reconciling contradictions, until we arrive at a principle which, in virtue of reconciling all contradictions, constitutes the supreme synthesis. In his Logic, Hegel's argument starts with the thesis of Being. Not-being is the antithesis, and the contradiction between thesis and antithesis is reconciled in the synthesis of Becoming. This continues until

he attains to the highest synthesis in the idea of 'Absolute Spirit'.

To take a simple illustration, let us suppose that we start with the idea of table. This is the *thesis*. An understanding of this idea involves its opposition by not-table. i.e., all other similar articles which together constitute the *antithesis*. But this contradiction is reconciled in the wider idea of 'furniture'. The idea of furniture then constitutes a new thesis which is opposed by things which are different. such as a house or a car. These two are again harmonized in the still wider idea of 'solid things'. It is in this way that our thought and knowledge about things gradually develop. untill we arrive at the widest idea of 'things in general'.

12. The Method of Doubt

Doubt. as we have seen. is one of the sources of philosophy and, though to a lesser extent, it is also a source of scientific inquiry. A philosopher may start with doubting all existing ideas and beliefs, doubting all authorities. or even such generally trusted faculties of knowledge as sense and reason. At least sometimes. if not too often. authorities disagree. our senses deceive (illusions. etc.). and we commit mistakes in reasoning. The philosopher. therefore. suspends all judgments. withdraw his belief from everything. and decides to begin from the beginning. This is known as "philosophic doubt." and this procedure of systematic doubting is called the Method of Doubt.

Doubting is naturally present. in some degree or other. in the philosophy of all ages. But the Method of Doubt is particularly attributed to the French philosoper Rene Descartes (1596-1650) of the modern period. Descartes systematically examined sense and reason. with arguments to show why they should be doubted. i.e. not to be naively trusted as sources of 'certain' knowledge. He pointed out that our senses "sometimes mislead us," and argued that even if God (being supremely good) may not deceive us. we may still be deceived by a "malignant demon" (Meditation I) in all our empirical beliefs and mathematical demonstrations. His first principle of human knowledge is "That in order to seek truth it is necessary once in the course of our life to doubt, as far as possible. of all things."[4] And although. inconsistently. he recognizes Divine authority and does not permit even the clearest of our reason to contradict *revealed* truths ("all that God has revealed"). he considers it to be characteristic of a true philosopher to doubt every other thing unless it is proved true by our mature reason.

Descartes. in his search for truth and his endeavour to leave no room for doubt, decided to follow the following four rules of inquiry:

"The *first* was never to accept anything for true which I did not clearly know to be such: that is to say, carefully to avoid precipitancy and prejudice, and to comprise nothing more in my judgment than what was presented to my mind so clearly and distinctly as to exclude all ground of doubt.

The *second*, to divide each of the difficulties under examination into as many parts as possible, and as might be necessary for its adequate solution.

The *third*, to conduct my thoughts in such order that, by commencing with objects the simplest and easiest to know, I might ascend by little and little, and, as it were, step by step, to the knowledge of the more complex....

And the *last*, in every case to make enumerations so complete, and reviews so general, that I might be assured that nothing was omitted."[5]

Doubt, however, may be provisional, or it may be definitive and final. In the former case, doubt is purely 'methodological' and the doubter is not necesarily a sceptic. In the latter case, doubt is the *result* of a certain process of inquiry and is a doctrine known as scepticism. Descartes, in spite of his Method of Doubt, was not a sceptic. On the contrary, David Hume, for example, is known as a sceptic, even though he did not explicitly began with doubting. Pyrrho (365-275 B.C.), Aenesidemus, Simplicius and Sextus Empiricus are well known sceptics in the history of Greek philosophy.

13. Scientific Method

Sciences have been broadly divided into two groups. In one group we have the *a priori* or abstract mathematical sciences (arithmetic, geometry, etc.), in another the natural sciences, such as physics, astronomy and biology. Mathematical sciences are concerned with quantity or number, while the natural sciences are concerned with concrete objects, actual events or natural phenomena. The method of the former is *deductive*, while the method of the latter is, broadly speaking, empirical. Philosophers have generally treated the mathematical sciences with respect and recognised them as yielding a kind of knowledge which is 'certain' (i.e., beyond doubt) and is indeed a model of certainty. The deductive procedure is axiomatic : it starts with some definitions or truths believed to be self-evident, and draws out conclusions which are necessarily implied by them. Philosophers have not questioned the rationality of the deductive procedure: but they have explained its nature, reflected on its foundations, and have asked some ontological questions about the entities (number, etc.) concerned.

As for the natural sciences, their ultimate aim is the *explanation* of natural phenomena, although they contain a lot of definitions, divisions and

classifications thereof. Explanation of natural phenomena involves a reference to 'causal laws', and the traditional view is that the method by which causal laws are discovered is essentially *inductive*. There may be deductive elements within this inductive procedure, but its basic stucture is inductive with all its virtues and limitations. Induction involves observation and experiment, and is roughly a three-tier structure: Data, Hypothesis, and Verification. Collection of data (i.e., information about natural phenomena) demands care and freedom from bias or prejudice, and the framing up of a hypothesis demands experience, sagacity and insight. But natural phenomena are so tangled and complex that in spite of all carefulness, patience and sagacity, any inductive procedure is more or less liable to mistakes. Again, induction may be popular or purely enumerative, or it may be scientific, i.e., based on the discovery of causal connections. But philosophers have generally pointed out that there is no 'necessity' in causal counections, that causal connections are only uniform sequences of events or observed regularities in the occurrence of natural phenomena. They have therefore argued that no inductive conclusions are fully certain, but only more or less probable.

As Bertrand Russell points out, all empirical inferences are based on a principle which he calls "the Principle of Induction." It is on the basis of this principle that we pass from the known instances of a phenomenon to one other or all of its unknown instances. But just as this principle cannot be disproved, it cannot be *proved* either. No empirical inference is therefore free from doubt. In his own words, "...the fact that two things [swans and the white colour, for example] have been found often together and never apart does not, by itself, suffice to *prove* demonstratively that they will be found together in the next case we examine. ...Thus probability is all we ought to seek.[6]

This restriction to probability is one kind of criticism of the scientific methods. Two further points of criticism may, however, be added to this. First, J.S. Mill's five experimental methods (the Methods of Agreement, Difference, etc.), which were believed by their exponent to be the core of inductive inference, have been criticised as being methods of neither proof nor discovery. Critical examination of individual methods has shown them to be subject to some serious limitations. Secondly, it is to be recalled that natural science is 'intellectualistic' in the sense that it is based on experience and a certain exercise of reason on empirical data. In principle, science is not to admit of any other organ of knowledge besides the intellect. But many thinkers, and especially the mystics, have looked upon this as too narrow a view of the scope of human knowledge. Many or most

of the followers of traditional religions believe in divine revelation as a source of knowledge, and the mystics lay emphasis on direct insight or *intuition* as the only instrument of our knowledge of the inner or deeper aspects of reality, particularly our knowledge of God.

14. The Method of Analysis

Analysis—as opposed to synthesis, intuition and speculation—is another method of philosophy. Analysis in philosophy, as compared with chemical or mathematical analysis, for example, is appropriately called "philosophical analysis." To analyse something is to take apart its components with a view to a better understanding of it. Philosophical analysis is immediately concerned with language, because it is through language that we express our thoughts, ideas and opinions. The object of philosophical analysis, however, is not language as such, i.e., words or sentences, but the ideas which the words stand for or the thoughts which the sentences express. In a word, philosophical analysis is not linguistic but *conceptual*. Analysis aims at unpacking a concept, at displaying its contents, or unmasking what is actually asserted in a proposition. Thus, for example, we give an analysis of the concept of 'cause' if we say that a cause is the invariable, immediate and unconditional antecedent of an effect, or of the concept of 'a law of nature' if we say that "P is a law of nature" is equivalent to : (1) P is a hypothesis regarding the course of nature, (2) P is general in the sense that it concerns a whole set of phenomena, and (3) P can be relied on. Or, we can cite the example of Bertrand Russell's analysis of the proposition, "The author of *Waverley* was Scotch". Russell analyzes this complex proposition into three components, as follows :

(a) at least one person wrote *Waverley;*

(b) at most one person wrote *Waverley;*

(c) whoever wrote *Waverley* was Scotch.

The point of his analysis is to show that 'the author of *Waverley*' is a description (a descriptive phrase) and not a proper name, so that it has no meaning in isolation from the context of the above proposition.

It is to be noted that philosophical analysis is nothing new. "On the contrary," as Ammerman puts it, "few great philosophers from Plato to the present day have failed to employ analytic tools as a philosophic technique at least some of the time in their writings."[7] It is, however, only since the beginning of the last (20^{th}) century that analysis, at least in the West, has come to be the most dominant factor in the field of philosophy. Philosophical analysis has occupied such a place of prominence that our

age has sometimes been called the Age of Analysis.[8] Bertrand Russell, G.E. Moore, Gilbert Ryle, A.J. Ayer and P.F. Strawson are only some of the best-known figures in this analytic trend. They have not only extensively practised analysis, but regarded analysis as the only appropriate method of philosophy.

Analysis, however, is not strictly of one kind; nor has the activity of analysis always been described in the same way. Thus Ayer, following Russell, once maintained that philosophical analysis results in 'definitions in use' and remarked: "We define a symbol *in use*, not by saying that it is synonymous with some other symbol, but by showing how the sentences in which it significantly occurs can be translated into equivalent sentences, which contain neither the *definiendum* itself, nor any of its synonyms."[9] Again, Gilbert Ryle contends that we can inquire "what it really means to say so and so" or "what is the real form of the fact recorded when this is concealed or disguised and not duly exhibited by the expression in question," and that philosophical analysis aims at exhibiting the *real* form of the fact by paraphrasing the expression into a better one. He calls any such expression (e.g., 'God exists', 'Unicorns do not exist,' 'Virtue is its own reward,' etc.) "systematically misleading" in the sense that "all expressions of that grammatical form would be misleading in the same way and for the same reason." It is to be noted that analytic philosophers, aiming at clarification of meanings, generally make a distinction between the 'grammatical form' and the 'logical form' of an expression and believe themselves to be engaged in replacing the misleading grammatical forms by the corresponding logical forms. "Pre-philosophical abstract thinking," Ryle contends, "is always misled by systematically misleading expressions, and even philosophical abstract thinking, the proper function of which is to cure this disease, is actually one of its worst victims."[10]

It is important in analysis to be clear as to the nature of and distinction between 'analysandum' (what is analysed) and 'analysans' (that in terms of which an analysis is given), and to consider what kind of relation obtains between them. G.E. Moore, maintaining that both the analysandum and the analysans must be *concepts* and not verbal expressions, lays down several conditons which any correct or worthwhile analysis must satisfy, such as :

(1) The analysandum and the analysans must not only be concepts but, in some sense, be the *same* concept.

(2) The expression used for the analysandum must be different from that used for the analysans, and yet they must be *synonymous*.

(3) The expression used for the analysans must explicitly mention concepts which are not explicitly mentioned by the other expression.

(4) The expression used for the analysans must also mention the *method of combination* (which may be conjunction or any one of various other methods) of the concepts in the analysans.

(5) Nobody can know or verify that the analysandum applies to an object without knowing or being able to verify that the analysans too applies to the same object.

Moore takes the instance of 'brother' and gives an analysis of it in terms of 'male sibling.' He also points out that this same analysis can be expressed in different ways, such as follows:

(1) The concept 'being a brother' is *identical* with the concept 'being a male sibling'.

(2) The propositional function 'x is a brother' is *identical* with 'x is a male sibling.'

(3) To say of a person that he is a brother is the *same* thing as to say that he is a male sibling.*

Connected with the method of analysis there has arisen a whole branch of philosophy which has come to be known as Analytic Philosophy. This name, however, is somewhat misleading. Analytic philosophy, in fact, is not purely or wholly analytical. Its spirit is critical, and its aim is clarification or elucidation of meaning, by means of analysis or by any means whatsoever. Analysis is possible only in the case of complex ideas. In other cases, a philosopher may try to clarify a concept or elucidate the meaning of an expression by comparing it with some more familiar concept or expression, or in some other way. He may, for example, compare 'God exists' with 'Gandhi speaks' to show that 'existence' does not denote a quality. Or, following Moore, he may compare 'good' with 'yellow' or marshal arguments (such as 'the open question argument') to show that goodness is a simple property and is not definable in terms of anything natural. Hence analytic philosophy is more appropriately to be called 'clarificatory' or 'elucidatory,' and its value lies in the fact that clarification of concepts is indispensable to any effective handling of the more ultimate philosophical questions.

* Notice how this analysis satisfies all the conditions stated above. For instance, the two expressions, 'brother' and 'male sibling', are different and yet synonymous; and the latter exprssion *explicitly* mentions the concepts of being a sibling and being male, which are not explicitly mentioned by the former.

CHAPTER V

SOME TYPES OF PHILOSOPHICAL REASONING

The proper method of philosophy, as we have seen (Chap.I: 6), is neither sensuous observation nor intutition, but *reflection,* i.e., argument and analysis. Arguments are broadly of two types, deductive and inductive. Philosophical arguments are not inductive in the sense that no philosophical problem is to be solved by a simple appeal to empirical data. Neither are philosophical arguments deductive in a simple straightforward way. Moreover, while in pure deduction the premises are taken for granted and we are only to draw out their logical implications, a philosopher is primarily concerned with examining or justifying his premises.

David Hume is well-known for his view that all unsophistical (i.e., genuine) reasoning is either experimental or mathematical, and that any work which contains neither of these two types of reasoning "can contain nothing but sophistry and illusion" and should be committed to the flames. This extreme position, however, has generally been rejected, and there have always been people who have believed in the possibility of philosophy, i.e., philosophy as a kind of inquiry which is distinct from both mathematics and natural science. Attempts have been made to show that just as the problems and methods of philosophy are of a distinct kind, so are the philosophical arguments. These arguments, as John Passmore points out, are quasi-formal, queer-looking and "deductive in character, but having certain peculiarities of structure"; and they often make use of ambiguity or senselessness of expressions, as well as the hidden implications of beliefs held without an awareness of those implications.

Some of these distinctive philosophical arguments will be considered in this chapter. It is, however, to be noted that a philosopher is by no means limited to such distinctive types of reasoning peculiar to him. In his intricate process of reasoning he may sometimes appeal to empirical data, make use of straightforward deductions or even of arguments employed by some other philosopher. As Karl Popper observes: "Philosophers are as free as others to use any method in searching for the truth." Nevertheless,

there *are* types of argument typically used by philosophers, which gives a philosophical discourse its peculiar taste and flavour and renders it distinguishable from discourses of other types.

1. Reductio ad Absurdum

'Reductio ad absurdum' is a Latin expression which literally means 'reduction to absurdity.' It is the name of a kind of philosophical argument which has two forms. In one form it is a method of *proof;* in another it is a method of *disproof.* Thus a reductio ad absurdum argument is either (a) the proof of a proposition by showing that its opposite (negation) is absurd or impossible, or (b) the disproof of a propositon by showing that it ultimately leads to absurd or impossible consequences. This kind of proof by reduction to absurdity is also called 'indirect proof.'

This method of proof or disproof is typically used in mathematics. In Euclidean Geometry, for instance, it is used to prove the theorems (i) that if two adjacent angles are supplementary, their exterior arms are in the same straight line, and (ii) that if two angles of a triangle are equal, the sides opposite to these two angles are equal. It is shown that the denial of the given theorem leads, in the first case, to the consequence that an angle and a part of it are equal and, in the second case, to the consequence that a triangle is equal to a part of it. Since, however, both of these consequences are impossible, it is proved that the theorems are true. It may be noticed that if we start with the negations of the theorems, rather than the theorems as such, we have instances of *reductio ad absurdum* as a method of disproof.

For any given proposition P, the two forms of *reductio ad absurdum* may be symbolized as follows—

As a method of proof: $\sim P \supset P / \therefore P$

As a method of disproof: $P \supset \sim P / \therefore \sim P$

And these may be easily demonstrated by the Rules of Implication, Double Negation and Tautology in the propositional calculus. It may be noted that indirect reduction of the so-called imperfect moods of the syllogism is a well-known case of the Reductio Argument. This is done by taking the contradictory of the conclusion of an imperfect mood as a premise in a new syllogism in the first figure, and showing that the conclusion of the new syllogism contradicts either the major or the minor premise of the original syllogism, which is absurd.

Let us, however draw one or two concrete examples of the Reductio Argument from the history of philosophy.

(1) Plato, following Socrates, held that true knowledge is knowledge

of concepts. This led to the view that the world of experience, the world as known through perception, is merely a world of appearances, and that the *real* world consists of 'forms' or 'ideas' which are universal, immutable and imperishable substances. The forms exist outside our mind, and the ordinary objects of experience are real only insofar as they copy or participate in them.

Interestingly enough, Plato himself put this doctrine of copying or participation to a severe test in his dialogue called 'Parmenides'. There Parmenides, the main character in the dialogue, argues that any interpretation of the notion of participation leads to an absurd consequence. In Plato's doctrine each form is a unity; but the participation of 'particulars' (particular objects) in a form actually destroys this unity. If a number of particulars are to participate in a form, the form will have to be 'in' each of them. But how? Either the whole of the form will be in each particular, or only a *part* of it. But in the first case the form will become *many* by multiplication, and in the second case by division. Thus while the doctrine of forms started with the unity (oneness) of each form, it now arrives at its multiplicity. The hypothesis of participation is thus reduced to absurdity.

(2) St. Anselm's famous proof of the existence of God, known as 'the ontological proof,' involves a reductio ad absurdum argument. In his *Proslogium* Anselm argued that God is believed to be "a being than which nothing greater can be conceived." "Therefore," he then contends, "if that, than which nothing greater can be conceived, exists in the understanding alone, [then] the very being than which nothing greater can be conceived, is one, than which a greater can be conceived. But obviously this is impossible."

His point is that a being which exists both in the understanding (i.e., in our conception) and in reality is greater than a being which exists in the understanding alone. Hence one who denies the existence of God is really saying that the being which, by its very nature, exists *not* merely as idea exists merely as idea, and this clearly is an absurdity.

(3) Ludwig Wittgenstein, in his *Philosophical Investigations* (1958), denies the possibility of any private language by which he means a language whose words "refer to what can only be known to the person speaking: to his immediate private sensations." (Sect. 243) A private language is to be contrasted with language as we usually understand it, i.e., with 'ordinary language' or 'public language'. An ordinary language is a social phenomenon; the words in it derive their meaningfulness from their use in communication and uniformity of response. No meaning could be

attached to a word unless the correctness of its use could be checked through interpersonal reference, which essentially involves memory and recognition. But this checking is not possible in the case of the words of a private language. A sensation or feeling is internal to a person and not observable to any other person. And therefore it cannot be ascertained whether a person really recognizes his sensations whenever they recur and thus use his words for the sensations correctly.

A.J. Ayer, on the contrary, acknowledges the possibility of a private language. He points out that, according to Wittgenstien, the ascription of meaning to a sign requires a justification, and this justification depends upon a test (of correct use) which is independent of "the subject's recognition, or supposed recognition, of the object which he intends the sign to signify." The crucial aspect of Wittgenstein's argument is obviously his scepticism about the subject's *recognition* of his own sensations. As against this Ayer remarks: "But unless there is something that one is allowed to recognize, no test can ever be completed: there will be no justification for the use of any sign at all."[2] He goes on to argue that even in the case of words of a public language, our assurance that they are being used correctly depends upon our recognition of the noises, shapes, etc. produced by the other persons. "But if without further ado I can recognize such noises, shapes or movements, why can I not also recognize a private sensation?"[3]

Ayer's answer to Wittgenstein's argument is a case of reductio ad absurdum because what he is really suggesting is that Wittgenstein's refusal to grant sense to words in a private language leads to the absurd consequence that it is impossible to give meaning to the words of *any* language whatsoever.[4]

2. Infinite Regress

Showing that a supposed explanation of a concept used in a theory leads to an infinite regress in one of the effective methods of refuting or discrediting the theory. 'Regress' means 'going backward', and therefore an infinite regress is a case of going backward indefinitely. One step in the movement necessarily presupposess another, and this in turn presupposes still another, and so on. The result is that the original assertion, the starting point, really leads us nowhere. If, for example, we propose a casual explanation of events in the world and at the same time suppose that every event has another event as its cause which, in turn, has still another event as its cause, and so on,* we thereby generate an endless process and render

* It is to be noted that a causal series is not necessarily regressive, it is regressive only if or because we aim at a causal *explanation* of events.

the actual occurrence of any event logically imposible. If we said that nobody learns anything unless he is taught, that knowledge is always a matter of transmission from one person to another, then there could be no learning and no knowledge.

An infinite regress is to be compared with 'infinite series.' An infinite series is a sequence of things without number, and may be either progressive or regressive. Usually a progressive series is simply called an 'infinite series' in contrast with an infinite regress. The series of cardinal numbers beginning with one is, for example, an infinite series. Starting with one we can go on with adding one indefinitely, and we have the series : 1, 2, 3, 4,5, ...n. To take another instance, if a statement P is true then we can have a metastatement Q in which we say that P is true, and again another statement (a meta-metastatement) to the effect that Q is true, and so on without end.

In brief, whereas an infinite series is logically impeccable, an infinite regress constitutes a logical defect. But how? In commenting on the regress argument against Plato's doctrine of forms, John Passmore remarks: "The infinite regress argument brings home to us the fact that the intelligibility which the philosopher is seeking is not to be found by going further along the path he has begun to tread; having failed to achieve it by introducing a single form into the situation, he is not going to do any better by introducing still more forms."[5] As he further remarks, philosophical regresses "demonstrate only that a supposed way of explaining something or 'making it intelligible' in fact fails to explain, not because the explanation is self-contradictory, but only because it is, in the crucial respect, of the same form as what it explains."[6]

Let us take some examples :

(1) F. H. Bradley, in his criticism of the ideas by which we try to understand the world, considers how the ideas of substance and quality are to be understood. Substance and quality, or the qualities of the same substance, cannot remain isolated, but must be related. But Bradley argues that the notion of *relation* is not free from troubles. If we say that two qualities, A and B, are connected by a relation C, then we have to explain exactly how C stands to A and B. On the one hand, we cannot say that C is a predicate of A and B and is thus internal to them; on the other, we cannot say that C is independent, and is *external* to A and B. If C is external we will have to explain how A, B and C are related. We may introduce another relation, say D, to connect them. "But such a makeshift," argues Bradley, "leads at once to the infinite process. The new relation D can be predicated in no way of C, or of A and B; and hence we must have

recourse to a fresh relation, E, which comes between D and whatever we had before. But this must lead to another, F; and so on, indefinitely. Thus the problem is not solved by taking relations as independently real."[7]

(2) Karl Popper doubts the possibility of 'certain' knowledge in science and regards induction as a myth. He puts forward a regress argument to disprove the possibility of a principle of induction. Roughly, the principle of induction is this: If, in a sufficient number of instances, any two sorts of phenomena are found to be associated, it follows that they will be associated in *all* instances. This principle is invoked to justify empirical inferences in which we pass from some to all and establish a universal proposition. Now since the principle of induction is itself a universal statement it needs to be justified inductively. But Popper argues that any attempt to do it will bring back the very same problems which occasioned the introduction of the principle of induction. He contends: "To jusfity it we should have to employ inductive inferences; and to justify these we should have to assume an inductive principle of a higher order; and so on. Thus the attempt to base the principle of induction on experience breaks down, since it must lead to an infinite regress."[8]

(3) Related to this is the question whether we can prove the most fundamental principles of logic, i.e., The Laws of Thought. In traditional logic these laws, excluding Leibniz's Law of Sufficient Reason, are as follows :

The Law of Indenity	A is A (Everything is identical with itself).
The Law of Contradiction (or Non-Contradiction)	Nothing can be both A and not-A.
The Law of Excluded Middle	Everything is either A or not-A.

In these statements A stands for anything— a thing, a quality or a relation. Formulated as truths about statements or propositions, the Laws, respectively, are:

If P then P.

Not both P and Not-P.

Either P or not-P.

These laws control our thought and constitute the foundation of all proof. But can they themselves be proved? The general opinion of philosophers is that they cannot. John Hospers, for example, shows that there can be neither an empirical nor a deductive proof of these laws. First, no amount of empirical evidence will convince us of the truth of these laws

unless we are already convinced. But nor can these be deduced from any other proposition. Since these laws constitute the very foundation of all proof, we cannot attempt a deductive proof of them without presupposing them, i.e., without begging the question.

Let us, however, suppose that we could deduce the laws from a body of other statements and let us call this body of statments K. "Then," Hospers now argues, "how could we prove K? By something else, J? And how prove J? The question is infinitely self-repeating: we are caught in an infinite regress."[9]

(4) Gilbert Ryle, in his well-known classic, *The Concept of Mind* (1949), raises some objections to 'the doctrine of volitions', i.e., to the view that an act of will or volition precedes and causes every action. It is these volitions or special acts of will which make our actions 'voluntary' and worthy of praise or blame. But then Ryle asks: Are volitions themselves voluntary or involuntary? "Clearly," he says, "either answer leads to absurdities." If our volitions themselves are involuntary then the actions caused by them cannot be voluntary. If, on the other hand, volitions themselves are voluntary then each volition "must issue from a prior volition and that from another *ad infinitum*." (*Ibid.*, p. 67) We thus have an infinite regress, a regressive series of volitions, which renders voluntary action impossible. In order for any action to occur voluntarily, there must be a prior volition, but that volition itself will require a prior volition for its own occurrence, and so on. It will therefore be impossible for any volition and thus for any voluntary action to occur.

3. Arguments to Meaninglessness

As John Passmore observes:

> In everday empirical arguments, or in the controversies of science, the objective, for the most part, is to show that some disputed proposition is true or false. Philosophical arguments, in contrast, frequently issue in the conclusion that a disputed proposition is neither true nor false; rather in what turns out to be a somewhat special sense of the word, it is meaningless.[10]

The allegation of meaninglessness is much stronger than falsehood. (One could say that it is *infinitely* stronger; because a statement which is taken to be false today may be proved true at a later date, whereas a really meaningless statement does not stand any such chance at all.) It is, therefore, extremely important in philosophy to notice when or how a statement which is apparently quite meaningful is, on scrutiny, found to be meaningless. Ordinarily, a statement is considered meaningless if the sentence which expresses it suffers from some defect, either syntactical or

semantical. An example of meaninglessness due to some syntactical defect would be 'God us loves all' or 'Dog the is animal a faithful'. On the other hand, 'All cats are fond of skilk' or 'All zats are fond of milk' is meaningless because the words 'skilk' and 'zats' are devoid of sense. Sentences which suffer from some syntactical error are called 'syntactically meaningless'.

Philosophers, however, speak of 'logical syntax' as opposed to ordinary syntax and of 'philosophical semantics' as opposed to semantics in ordinary discourse. They have developed theories of meaning which render some types of words and sentences meaningless, or assign to them types of meaning which are different from what they are ordinarily believed to possess. Let us take some examples.

(1) From the standpoint of ordinary syntax (in 'ordinary grammar') both of the following sentences are in order:

The baby is in bed.

Saturday is in bed.

Even though we do not normally utter or write any sentence like 'Saturday is in bed' there is no grammatical objection to it. But there is a logical objection. Logical syntax demands that the words in a sentence must not only obey the rules of ordinary grammar but must also be free from conceptual disharmony. Obviously, Saturday is not the kind of thing which could be in bed; Saturday or indeed any day of the week and things which could be in bed belong to two incompatible categories. And similarly with such queer sentences as 'Green ideas sleep furiously,' 'The sunlight now smells sweet to me,' and so on. All such sentences violate the rules of 'logical grammar'.

(2) Berkeley, from his empiricist premises, argued that the expression 'material substance' is meaningless because it stands for something imperceptible. Material substance, as he points out, is variously described: it is that in which material properties *inhere* or which *underlies* or *supports* the properties. All these descriptions, Berkeley contends, can be given meaning only in terms of *ideas*, and all ideas are derived from experience. In the same vein, Hume argued that all our ideas are only copies of impressions and that, since we have no impressions of such things as substance, self and causal power, the words which stand for them cannot have a meaning. And since the words are meaningless the statements which make use of them must be devoid of meaning.

(3) Perhaps the best-known and most sensational argument to meaninglessness has been presented by the logical positivists in their Principle of Verification. Kant, in his *Critique of Pure Reason*, tried to

domonstrate with various arguments that metaphysics is impossible. The logical positivists of the Vienna Circle founded in 1924 went a step further and declared that metaphysical statements are simply meaningless. They used a criterion of meaningfulness which, in the words of A.J. Ayer, is that "a sentence is factually significant to any person if, and only if, he knows how to verify the proposition which it purports to express, that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false."[11] Put simply, the criterion is that no factual assertion (assertion about matters of fact) is meaningful unless it is empirically verifiable. This is known as 'the verifiability criterion' or 'the testability criterion' of meaningfulness; and it defines meaning in terms of 'truth-conditions'.

Armed with this criterion the logical positivists proceed to 'eliminate' metaphysics,[12] i.e., to reject all metaphysical assertions as nonsensical pseudo-statements. Thus all statements concerning Parmenides's Being, Plato's Forms, Aristotle's Prime Mover, Spinoza's God as substance, Hegel's Absolute Spirit and Heideggar's 'Nothing' are branded as meaningless. No such metaphysical statement entails any observational statement and is therefore irrelevant to all questions of empirical verfication.

(4) Argument from Excluded Opposites is another way to demonstrate the meaninglessness of words or statements. Some words go in pairs of opposites, such as 'simple' and 'complex', 'finite' and 'infinite', 'clear' and 'vague', 'good' and 'evil', etc. The meaning of one member in each pair is defined by means of contrast with the meaning of the other member. Thus we do not understand what 'simple' means without contrasting it with 'complex', and vice versa. They are in fact so related that to eliminate one would be to eliminate the other as well. And much the same is true of any predicate whatsoever. The function of a predicate is to qualify and, in so doing, to distinguish or classify. Every predication is limitation, and every limitation is opposition. Hence any predicate without an opposite of some sort or other, i.e., any 'universal predicate' must be senseless. "The content of a concept," as Frege said, "diminishes as its extension [denotation] increases; if its extension becomes all-embracing, its content must vanish altogether."[13] An argument from Excluded Opposites would consist in saying of a particular statement, doctrine or theory that (a) it uses a universal predicate and is therefore senseless or (b) so uses one opposite of a pair that the other opposite is 'excluded', i.e., banished from the language, with the result that the opposite used and hence the statement etc. in which it is used is thereby robbed of its sense.

Passmore cites a few instances of the argument from Excluded Opposite. One instance is Christopher Blake's argument for the existence of "objective' history. In an article on the objectivity of history (*Mind*, 1955) Blake contends that it is logically impossible that there are no objective historical writings, since otherwise there would be no non-objective history either. We could give no sense to the expression non-objective history unless there were at least some objective history. As one critic of historical relativism, echoing the same argument, remarks :

> Finally, the idea of subjectivity which the relativists used was literal nonsense. "Subjectivity" is a correlative term which cannot be meaningful unless its opposite is also meaningful. To say that all knowledge is subjective is like saying that all things are short. Nothing can be short unless something is tall. So also no knowledge can be subjective unless some knowledge is objective.*

In another instance Norman Malcolm refers to such words as 'large' and 'small', 'animate' and 'inanimate', etc., which operate in pairs. Each member of a pair, Malcolm argues, *requires* its opposite, so that an exclusive use of it will amount to a proposal for abolishing the use of the other word. If, for example, a philosopher says that all statements are vague, he thereby proposes to abolish the word 'clear'. The result is that both 'vague' and 'clear' are deprived of their use and therefore of their meaning, and the expression "All statements are vague" is itself rendered senseless.

4. Paradigm-case Argument

A paradigm-case argument is the method of showing the absurdity or senselessness of a philosophical position by an appeal to the way words of a certain kind in ordinary language are given their meanings. "Paradigm-case argument," says K. S. Donnellan, "is a form of argument against philosophical skepticism found in contemporary analytic philosophy. It counters doubt about whether any of some class of things exists by attempting to point out paradigm cases, clear and indisputable instances."[14] A paradigm is simply a model instance or an ideal example. The point of a paradigm case argument is that if a word has actually a use in our language and is such that it has been defined by pointing to real instances (one or many) of its application, then it cannot be denied that there are such instances.

Words or expressions can be defined either ostensibly or descriptively.† If, for example, we define the word 'giraffe' by saying that

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* David H. Fischer, *Historians' Fallacies* (Harper Torchbooks, 1970) p.43 n.

† This corresponds to Russell's distinction between 'knowledge by acquaintance' and 'knowledge by description.'

the giraffe is a spotted animal with four long legs, a long neck, a short tail etc, we will define it descriptively. If, instead, we define it (teach the meaning of the word to a child, for example) by pointing to giraffes in a zoo, we define it ostensibly. Now, Norman Malcolm argues[15] that some expressions can be defined only ostensibly, as, for example, 'it is probable that' and 'it is certain that'. In other words, we can learn the use of these expressions only by being shown cases of empirical knowledge where they apply and cases where they do not apply and noticing their differences. Hence it will be absurd or senseless for a philosopher to assert "No empirical statements are certain."

(1) Paradigm-case arguments have been used to counteract skepticism about our perception of material objects, about our knowledge of empirical facts generally, about free will, etc. As for free will, Antony Flew remarks:

> Crudely : if there is any word the meaning of which can be taught by reference to paradigm cases, then no argument whatever could ever prove that there are no cases whatever of whatever it is. Thus, since the meaning of 'of his own free will' can be taught by reference to such paradigm cases as that in which a man, under no social pressure, marries the girl he wants to marry (how else *could* he be taught?) : it cannot be right, on any grounds whatsoever, to say that no one *ever* acts of his own freewill.[16]

Flew goes on to insist that such cases as the paradigm of 'the man's marrying the girl he wants to marry' must occur, and that the specimens of paradigm could not have been wrongly identified. If the specimens were wrongly identified, he argues, the meaning of the expression could not have been given in terms of them. Hence the specimens, to the extent that the meaning is given in terms of them, "are, by definition, what 'acting of one's own free will' is."

(2) G.E. Moore, in his famous essay, "Proof of an External World," demonstrated the existence of external (material) objects by successively holding up his two hands and saying "Here is one hand" and "Here is another." He called it a perfectly rigorous proof and claimed that he knew, or it was certain, that two human hands (i.e., two external objects) existed at the moment. One could interpret Moore's proof as an instance of the Paradigm-case Argument and suggest that what Moore was really claiming is that a rejection of his proof would be tantamount to rejecting the ordinary use of the words 'know' and 'certain', which has been established through a reference to the paradigmatic instances of knowledge and certainty.

In general, however, the Paradigm-case Argument for the existence of material objects consists in claiming that once the skeptic asks himself

how such words as 'table', 'chair', 'cat' and 'dog' could come into our common language, how their meanings have been taught or learnt, he will find it absurd or senseless to believe that there are no material objects or that we have no real knowledge of them.

(3) We have already noted Karl Popper's rejection of induction. A contrary view is expressed by Paul Edwards, in which he defends induction against Bertrand Russell's doubts. Russell held that induction can only be justified by an *a priori* principle which he called 'the principle of induction'. This principle, he argued, can neither be proved nor disproved by an appeal to experience. "Thus we must either accept the inductive principle on the ground of its intrinsic evidence; or forgo all justification of our expectations about the future."[17] As against this Edwards advances what may be called a Paradigm-case Argument. Russell, in his account of induction, makes use of the words 'reason' and 'evidence' and in fact contends that, whatever the quantity of positive evidence at our disposal, we have no good reason to suppose, or sufficient evidence for believing, that the future will resemble the past. Edwards argues that Russell not only deviates from common-sense or the ordinary use of these words, but confuses between deduction and induction.

Edwards mentions some paradigms of the use of 'reason' and 'evidence' in inductive reasoning. One such paradigm is the inductive inference that if a man jumps from the window of the Empire State Building or from some other high altitude, he will move downward rather than in the direction of the sky. Edwards argues that there is "an excellent reason" for this inference, which "consists in the fact that whenever in the past a human being jumped out of a window of the Empire State Building his body moved in a downward direction; that, more generally, whenever a human body jumped or was thrown off an elevated locality in the neighbourhood of the earth, it moved downwards and not upwards or at an angle of 1800...."[18]

Edwards' point, as we take it, is that it is in this kind of paradigmatic situation that we learn the use of such expressions as 'inductive reason', 'inductive evidence' or 'justification of induction', and Russell's doubt is illegitimate insofar as it falls outside the bounds of actual inductive discourse. In the name of evidence Russell mistakenly demands 'conclusive evidence' which is actually a mark of deduction and not of induction.

5. Allocation to Categories

A very important type of philosophical reasoning involves what may be called 'category-confusion', i.e., misallocation to categories.

Categories, as we shall see (Chap. VI), are the most general concepts by which we try to understand the world or explain phenomena. They are 'logical types', and are to be distinguished from 'classes' which are only 'natural kinds' known through experience. The crucial distinction between a category and a class is that whereas a misclassification results in a proposition which is simply false, a mistake in categorization yields a proposition which is not merely false but is absurd. If, referring to a fox at a distance, someone says "That's a dog" or if a doctor says of a malarial patient that he is suffering from typhoid, then both of them are making false statements. But if someone says, for instance, that happiness is a *process* or 'being greater than' is a *property*, he is committing a categorial error and his statements will ultimately lead to absurd conclusions. Or again, to take an instance from Plato's dialogue 'Euthydemus', does 'knowing' belong to the same category as 'laughing?' If we answer affirmatively, we arrive at the strange conclusion that one cannot know anything without knowing everything. This is due to the logic (i.e., formal consequences) of the concept of laughter. One cannot laugh in part : if a person laughs, his *whole* being is involed therein. On the contrary, it is obvious that we do and therefore can know only some things, and not all things necessarily. Passmore argues that actually an infinite regress is generated by the assumption that to know anything is to know everything. Let us, however, take some more instances of the category-allocation argument.

(1) One could ask whether 'seven in number' and 'large in size' are predicates which fall under one and the same category. Now, from the premises, 'The planets are large in size' and 'Mars and Venus are planets' we can validly conclude that Mars and Venus are large in size. But from the premises 'The planets are seven in number' and 'Mars and Venus are planets' we cannot conclude that Mars and Venus are seven in number. All the three premises are true and the arguments are of the same in form, and yet the conclusion of the second argument is unacceptable. It follows that the predicates 'seven in number' and 'large in size' belong to different categories.

(2) P. H. Nowell-Smith argues that a descriptive word like 'dandelion' is logically different from a word like 'weed' which he calls a 'gerundive-word', i.e., a word which expresses oughtness, fitness, duty, etc.[19] The predicate 'being a dandelion' stands for certain inherent natural properties of the dandelion plant, such as the shape of leaves or the colour of its flowers. If a plant is a dandelion, it is a dandelion everywhere and for all

individuals. But dandelion may be a weed at one place and not elsewhere. depending on the attitudes or interests of the people concerned. In other words, whereas 'being a dandelion' is a qualitative predicate, the predicate of 'being a weed' is relational: being a dandelion does while being a weed does not follow from the mere possession of some specific natural properties. These two predicates, therefore, belong to two different categories.

Nowell-Smith also distinguishes descriptive words from what he calls 'Aptness-words' (i.e., "words that indicate that an object has certain properties which are apt to arouse a certain emotion or range of emotions") and contends that one of Moore's most important arguments rests upon ignoring this distinction. Moore holds that beauty and ugliness are intrinsic properties, that a thing is beautiful or ugly "quite apart from its effects on any human feeling." He asks us to imagine two worlds, one exceedingly beautiful and another the ugliest, and to admit the conclusion that the existence of the former is better than that of the latter. Nowell-Smith argues that 'beautiful' and 'ugly' "are not purely descriptive and they cannot be understood to mean anything at all if the presence of human beings and their tastes and interests are excluded."[20] He may therefore be taken as suggesting that Moore's argument rests on a category-confusion. on a failure to recognize that 'beautiful' and 'ugly' belong to the category of relational predicates rather than that of qualitative predicates.

(3) Gilbert Ryle, a British philosopher, is the best known among philosophers for category-allocation arguments. He gives the name 'category-mistake' to mistakes arising out of categorial confusion. A category-mistake is the mistake of representing a fact as if it belongs to one logical type or category when it actually belongs to another. The three preliminary illustrations by which he explains this are the mistakes of supposing that a *university* is of the same type as its constituent colleges. offices etc., that a military *division* is a counterpart to the battalions. batteries and such other units, and that the *team-spirit* of a cricket team is something over and above the operations of bowling, batting, etc. which is contributed by a separate individual. As to the first illustration, Ryle argues that if a foreigner who is visting Oxford or Cambridge for the first time and is shown the colleges, libraries, administrative offices, etc., asks 'But where is the university?', he commits a category mistake, because he fails to understand that the University is not another collateral institution but is just the way in which all that he has seen is organized. His mistake lies in supposing that the University "stood for another member of the class of which these other units are members. He was mistakenly allocating the

University to the same category as that to which the other institutions belong."[*]

Ryle applies the notion of category-mistake to the Cartesian theory of mind-body dualism which he variously calls 'the Official Doctrine', 'a philosopher's myth' or 'the dogma of the Ghost in the Machine'. He takes for granted the reality of the body and bodily processes: nor does he deny the reality of mental processes and dispositions, such as thinking, feeling, willing and attending. What he denies is that these processes and dispositions inhere in a separate entity called mind and are parallel to bodily processes. The category-mistake consists in misallocating the mental aspects of our behaviour to mind as a distinct *entity* within the body. This is a confusion of categories analogous to treating the University as belonging to the same category as its constituent parts. Mind, in short, is not an entity, a substance, but rather the *way* a person behaves.

6. Self-Refutation

Any thesis, theory or doctrine, philosophical or otherwise, may be defective in more than one way. Its premises may be false or doubtful, or its argument may be invalid; but its gravest defect is to be self-refuting, i.e., to contradict itself and thereby make itself impossible. We have already seen how reductio arguments make use of contradiction. But there are different types of contradiction and, accordingly, different forms of 'the Self-Refutation Argument'.

A statement may be contradictory either because it is a compound of two or more statements one of which negates another, or because its terms are partly or wholly inconsistent. 'Spinoza was and was not excommunicated' (P.~P) is a contradiction of the first sort, while 'This is a square circle' or 'Some bachelors are married' is a contradiction of the latter sort. Contradictions of these sorts may be quite explicit, or more or less implicit; but in each case they are essentially formal. In the case of explicit contradiction, the statement's contradictory character is self-evident; in the other case, the contradictory character becomes evident as soon as the real form or structure of the statement is revealed by means of analysis. Any statement or theory which is formally contradictory is self-refuting— 'absolutely self-refuting', as Passmore calls it. But there are also other types of self-refutation, and let us consider them in brief.

(1) *Pragmatic Self-refutation* : We have a case of pragmatic self-refutation when a person's activity is itself a counter-example to what he asserts. If, for example, a person says 'I cannot speak' or 'I cannot

[*] Ryle, *The Concept of Mind* (Barnes and Noble, 1949), p.16.

pronounce the word "eccentric," or if, in response to someone's call, he says "I am asleep," his action itself refutes what he asserts. Or again, if somebody, referring to himself, asserts 'I do not exist,' his very assertion counteracts the denial of his existence.

Descartes' Cogito is a historically famous instance of self-refutation argument. He argued that, even if a thinker could doubt everything else, it would be impossible for him to doubt his own existence. The proposition, 'I exist,' is necesarily true each time it is expressed or conceived by him, "for there is a repugnance in conceiving that what thinks does not exist at the very same time when it thinks." (*Principles*, VII) Descartes' point is that for anybody engaged in thinking 'I exist' is self-verifying and its opposite, 'I do not exist,' self-refuting. Following Hintikka, the inconsistency involved in the latter assertion could be called 'existential inconsistency' and the assertion itself a case of 'existential self-refutation'.[21]

(2) Ad Hominem Self-refuation : An argument of this type consists in showing that something cannot be the case because it contradicts the *admission* that it is the case. If, for example, someone had seriously *uttered* the sentence, 'I sometimes say that I cannot speak', that would be a case of pragmatic self-refutation. If, instead, he had *written* the sentence 'I sometimes say that I cannot speak' or 'I sometimes think that I cannot think,' then each of his admissions as a whole (admission + what is admitted) would be self-refuting, and it would follow that he can really speak and think.

(3) A third type of self-refutation is illustrated by epistemological relativism, or by unmitigated skepticism, i.e., by such sentences as "There are no truths." Protagoras, the sophist, said that man (i.e the individual man) is the measure of all things. His view, in other words, was that whatever appears true to an individual is true to him and none else can judge it to be false. Plato, in his *Theaetetus*, argued that this doctrine is self-refuting because it allows that if someone other than Protagoras considers his doctrine false (because it appears so to him), Protagoras has to admit its falsity. And similarly with 'There are no truths' or 'All sentences are meaningless'. If it is true that there are no truths, then 'There are no truths' itself turns out false. And if *all* sentences are meaningless then it is itself meaningless to say this.

7. Disproof by Reminders

To disprove something by means of reminders is to refute it by producing counter-examples. This type of reasoning is simpler than any of the other types considered above. There is, however, no *proof* by reminders.

An empirical hypothesis concerning a set of natural phenomena, for example, may be easily disproved by producing contrary instances. Even a single instance would be good enough. But no number of favourable instances, however large, will amount to a proof of it in the strict sense of the term.

This method of disproof is or may be used in everyday life, in science, and indeed in any field, theoretical or practical. If, for example, someone extols democracy as an infallible guarantee of human rights, he may be reminded of its intrinsic limitations, or if an orthodox follower of some religion claims that his religion is the best of all, he may be reminded of what other people think of their own religions. But the reminder-argument is particularly important in philosophy because, as Passmore observes, "philosophers, as it happens, need a lot of reminding."[22] And this is perhaps chiefly due to the abstract and involved nature of the philosopher's subject-matter in which temperament and personal bias can play a role even when he is careful.

When, in Book I of Plato's *Republic*, Polemarchus, following the poet Simonides, defines righteousness as 'rendering every man his due', Socrates puts forward a counter-example, namely, that it would not be right to return a weapon to its owner after he has gone mad. John Locke, in criticising the doctrine of innate ideas, argues that whereas innate ideas are said to be universally present in men, "all children and idiots have not the least apprehension or thought of them" (*Essay*, I, p.40). When Hume contends that memory is nothing but a vivid perception differing from imagination only in the degree of force and vivacity, he needs to be reminded that remembering involves the claim that what is remembered actually happened in the past. Passmore remarks: "It is amazing how effective and important these reminders can be. People can be led into saying that 'words are names', quite forgetting that 'or' and 'if' and 'the' are words; or can assert that 'the meaning of a word is the way it is used,' quite forgeting that a misuse is not a non-use but a way of using...."[23] Wittgenstein, who almost exclusively stood for reminding, is himself reminded (for instance) that "most people know how to use the word 'amen' and the sign 'Q.E.D.', yet far fewer know their meanings."[24]

Comments

The above are some of the types of reasoning distinctively philosophical. Philosophers, however, have not viewed all of them as equally important or equally immune to criticism. As for importance, Gilbert Ryle, for instance, speaks of "the primacy in philosophical reasoning of the *reductio ad absurdum* argument," and Waismann finds

reductio ad absurdum and infinite regress arguments to be amongst "the most powerful weapons in the philosopher's armory."* On the other hand, Ayer casts doubt on paradigm-case arguments, and Passmore on this and some other types. Ayer examines the paradigm case argument against physical objects and remarks that "the argument is not conclusive," that the sceptic "is not refuted merely by the fact that the words like 'chair' and 'table' have a customary use."[25] Passmore seems to go even further when he remarks that the paradigm-case argument 'does nothing to show that certain philosophical positions are 'absurd' or 'senseless'.[26] Moreover, he draws our attention to the difficulty and uncertainty surrounding the distinction between class and category, and tries to show that some of the mistakes which Ryle calls 'category-mistakes' are not really so. He, for example, argues that the foreign vistior's mistake about the University is only a case of mis-classification, a part-whole confusion.

It seens, however, that of all these various types of reasoning the arguments to meaninglessness have been most severely subjected to criticism. Many philosophers, including some positivists themselves, have either rejected the verification principle or called for its drastic revision. Within years after the advent of logical positivism (in 1920's), W.T. Stace produced a *reductio ad absurdum* argument against the principle of verifiability. A.C. Ewing found it either self-refuting or false, and Bertrand Russell alleged that Moritz Schlick's idea of verification involved an infinite regress. The word 'meaningful', says Alston, "is not a term with clearly defined boundaries," and John Hospers brands 'meaninglessness' as "an expendable term". G. J. Warnock warns us by saying that 'if we fully appreciate the complexity of the use of language we shall be very cautious indeed in the application of the word "meaninglessness".'[27] And finally, Passmore, after having examined the verifiability argument in some detail, remarks: "Hume and the positivists after him have failed to produce any general argument to show that certain expressions are meaningless."[28]

However, our present concern is to explain and understand the types of reasoning, not to evaluate them. The kind of criticisms stated above must not be taken to imply that the types of reasoning, or at least some of them, have no real value. It may be noted here that the value of any method or form of argument depends not merely on its intrinsic efficacy but also on when or how it is used. The fact that these reasoning procedures have been continually employed by competent thinkers may be viewed as suggesting that each of them has an important message for us.

* Vide—Friedrich Waismann. "How I See Philosophy" (1956).

PART III

Epistemology

CHAPTER VI

SOURCES OF KNOWLEDGE

1. Popular and Scientific Views

The question is : What are the primary sources of our knowledge? Whence do we get our ideas originally? In the popular view, we are endowed with certain faculties of knowledge, viz., sense, reason and intuition, and we owe our ideas to all of them. For example, we owe our ideas of colours and tastes to sense: those of geometric figures to reason; and those of aesthetic appreciation to intuition. There are, however, certain truths—religious truths, for instance—which are revealed only to specially competent minds. It is, of course, not possible for an individual to survey everything in his brief span of life. Certain ideas, therefore, we have from authority.

Science believes in no vested interests in the intellectual sphere and has no veneration for the so-called 'specially competent' minds. It accepts only those authorities which stand a critical examination. The formal sciences like mathematics are *a priori* and work by reason. Certain fundamental principles are directly apprehended as self-evident, and the whole body of science is deductively woven out of them. The material sciences like physiscs and chemistry are *a posteriori* and work inductively. In brief, science recognizes and makes use of our ordinary faculties of knowledge without a thorough examination, simply because that is not its business.

Thus, while popular philosophy is of a compromising attitude, science is not interested in a critical consideration or thorough examination regarding the ultimates of the issue. But the philosopher is neither for a compromise nor for a workable hypothesis: he is interested in critical truth beyond every possibility of doubt. Hence epistemology inquires which of these sources exactly is or are the 'real' source or sources of our ideas? It may be that sense alone is the original source, and reason simply plays upon the sensory materials. The same may be said of reason, intuition or authority; or any two or more of these sources may be combined.

2. Authoritarianism

Authoritarianism is the doctrine that the ultimate source of knowledge

is an authority of some type—an institution like the church or the state, a scripture like the Quran, a moral or civil code or a person.* We must look up to some authority for all or at least some important types of knowledge. We, the commoners, lack the power or opportunity to acquire such knowledge by our own efforts. There are men of extraordinary powers or men favoured by God, to whom alone such knowledge occurs. The task of the rest is simply to appreciate and follow them.

Although authoritarianism has its drawbacks, appeal to some authority or other is nothing uncommon, useless or unnecessary. In fact, autoritarianism has a long history. It is prevalent particularly in the religious and moral spheres. Hence it had its heyday when the religious authority was dominant. Freedom and individualism in the sphere of thought have grown, naturally, with freedom in other spheres of life. Authoritarianism was therefore more dominant in antiquity, and has on gradually declined. Modern philosophy is very largely the offspring of a reaction to medieval authoritarianism.

3. The tests of authority

Even though authority plays a very important role in the sphere of knowledge and belief, no authority is its own justification. There are some criteria by which an authority is tested or its merits assessed, viz., number, age and prestige.

(a) Number : The weight of an authority is proportionate to the number of its followers. For instance, our ordinary standards of morality as well as our national prejudices, rest upon this notion.

But this test is not quite satisfactory. Truth or falsity is nothing democractic, and not to be determined simply by a counting of heads. As it is said, errors are many but truth is one. As Patrick puts it: "The *vox populi*, if it is the voice of God, is often the voice of a false God, as a most customary observation of history readily reveals. At almost every turn of the tide in history there are evident the tragic errors into which majority opinion can fall."[1] Once it was a common belief that the earth is flat and that the world is geocentric. But these beliefs were not true simply because they were universal.

(b) Age or temporal duration : The older an authority, the more trustworthy it is. An institution which has retained its sway for centuries is certainly more authoritative than the one which has just seen its birth or is

* 'Authority' has different shades of lexiconic meaning. Here it means (i) either the power to influence opinion and induce belief, (ii) or the right to give evidence, (iii) or 'anything' holding that power or right. Testimony is simply the evidence of some such authority.

in its childhood.

As Prof. Montague points out, there are three reasons for the strength of this test. First, it has a natural appeal to the sentiment of the authoritarian who is conservative in temperament. Secondly, the notion that just as an old man is more experienced and therefore wiser and more reliable, so also our ancestors of antiquity who have held their authority over great lengths of time are more trustworthy. Thirdly, the old theory that the remote past is the golden age of man in which truth was revealed direct from God, and the later history is only one of degeneration of truth.

But none of these reasons makes this test really strong. Sentiments have nothing to do with the truth-value of judgments. The analogy of old man is fallacious. If our ancestors were alive until to-day, their experiences accumulated through generations might have made them wiser, but that is not the case in fact. The intellectual background in which our ancestors formed their opinions is inferior to ours. "In all that makes for wisdom," says Montague, "we are not younger but older than our ancestors."[2] The third reason presents a theory of regressive evolution, whereas the very key-note of evolution is progress.

(c) **Prestige :** By prestige is meant reputation earned from previous achievements. Honesty and insight, respectively, constitute the moral and the intellectual prestige of an authority. This test demands that only that authority is to be trusted which has already established its prestige.[3]

4. Relative merits of the tests

While the test of age is actually more respected than number, the test of prestige is the most important of all. The truth of a belief is not to be measured by the number of individuals who entertain it, nor by its age, but by the nature of its source. It deserves respect only if it rests upon an authority which has proved its honesty, insight, ability and skill.

In our ordinary life, we accept readily the verdict of a man who has earned some reputation as honest and expert. For example, we accept a doctor's diagnosis. No man is virtually immune from this test. Most of our ideas which we accept as scientific knowledge (e.g., our geographical or astronomical knowledge) we usually accept upon the prestige of an expert, an author, or a teacher.

But the test of prestige is of special importance in the sphere of scientific and philosophical investigations. The scientist cannot seriously study every department of nature or the philosopher cannot possibly enter deep into every field of science for his data without prejudice to his own interest. There is a division of labour among particular sciences, and

between science and philosophy. Hence the scientist or the philosopher has to accept certain things upon authority, but only upon such authority as has established its prestige.

In brief, prestige is the only genuine and independent test of authority. Other tests are of very little value and are dependent upon prestige. That is to say, when we respect an authority because of number or age, that is because we tacitly ascribe prestige to it on the evidence of number or age. But this does not mean that the test of prestige is thoroughly infallible. To err is human, and in spite of the best of sincerity and effort, a man may commit mistakes. It is, therefore, that science and philosophy have been changing and progressing through a review of and necessary improvement upon what has gone before.

5. Criticism of Authoritarianism :

(1) The authoritarian attitude as such is obnoxious to the critical spirit of science and philosophy. It is generally the attitude of the common man. The causes of its prevalence are man's natural suggestibility, his emotion of astonishment, inferiority complex and laziness. But the aim of science is perfect certitude, which can be attained not by an easy appeal to some authority but by careful, independent investigation. The path of truth is not a bed of roses.

(2) The authoritarian attitude is justified only when a division of labour in our intellectual pursuit becomes indispensable. In fact, it is indispensable not only in our ordinary life but even in science and philosophy. Established authorities of one field facilitate investigations in another. But we cannot accept just 'any' authority. There are three general tests of authority—number, age and prestige, of which the last one is alone really dependable. But prestige is also not infallible. In a word, even when authority is inescapable, there are great difficulties as regards our choice of authority.

(3) These difficulties are specially acute in the case of religion. Religious authorities want us to accept them upon faith. But faith is a poor substitute for knowledge, and does not satisfy the critical mind. Moreover there is a multiplicity of inconsistent claimants. There are numberless religions claiming finality and defending themselves with the same pattern of arguments. Each religion apparently claims to have monopolised the truth, and the critical observer finds if difficult to side with any.

(4) Historically, authoritarianism has been both a blessing and a curse. Religious and social authorities fulfilled a great need, when little education and opportunity was available to the ordinary people. But they have also

done immense harm to man's progress in the field of science and philosophy, and blinded man to many moral misconceptions and social corruptions which might otherwise have been easily detected and fought. Unquestioned faith in specific religious authorities has been responsible for crusades and blood-sheds, and subjected many great devotees of truth and human welfare to inhuman torture. The authoritarian attitude is by nature liable to degenaration and easily overlooks the conditions which an authority must fulfil for its acceptance.

[There are two inherent weaknesses of authoritarianism. First, no authority is a *primary* source of ideas. It is only a guarantee for the truth of ideas acquired from some other source—experience, thought, revelation or even some other authority. Secondly, no authority is a justification for itself. In order to justify itself it must be in agreement with independent findings of the intellect. Hence the paradox that the basis of authoritarianism is non-authoritarian.

A simple advice to the authoritarian is : No authority as long as we can do without it: but if we cannot do without, let us accept an authority only after due deliberation.]

6. Rationalism

Rationalism is that theory of knowledge according to which our reason is the only source of 'certain' knowledge. Reason is simply our faculty of correct thinking which works in collaboration with or independently of senses. The mystic's intuition may be doubted as but a subjective mental state to which a correspondence of facts is at best accidental. Sense perception is relative to bodily and other conditions, and can give only a confused picture of things. The verdicts of pure reason are alone reliable. In order to know, we are to shut up our windows of sense and meditate (as if with closed eyes) according to the rules of logic.

Rationalism virtually begins with the Eleatics of ancient Greece and attains considerable maturity in the philosophy of Plato and Aristotle. It has been historically a recurrent tendency to be found, more or less, in every age. In the modern period, it appears in Descartes, the very father of modern philosophy. He is immediately followed by Spinoza, Wolff, Leibniz and others who raise the movement to its highest peak. Of late, it is no longer a well-defined school, finding only scattered support in such idealists as Bradley and Bosanquet.

Rationalism appears in different forms, but there are certain common elements. Its basic tenet is that knowing is a process of inference from some fundamental propositions of a self-evident nature. Its method is deductive like that of mathematics and has two stages : intuition and eduction. By intuition we are aware of the original propositions, and all

other propositions are educed from them by a step-by-step procedure.*

7. Some great rationalists : Descartes

René Descartes (1596-1650) a renowned French mathematician and philosopher, develops his view mainly in his works, *Discourse on Method* and *Meditations*. Realising the sharp contrast between traditional philosophy, rent with disagreements and uncertainties, and mathematics embodying perfect certainty, he proposes to apply the mathematical method in philosophy. To that end, he looks for a starting point—some truth perfectly certain. By his 'method of doubt' he calls in question every source of knowledge including sense and even reason. But, all at once, he discovers that one thing is certain, viz., 'I exist'. Doubting necessarily implies a doubter, so that "this proposition 'I am, I exist', is necessarily true each time it is expressed by me, or conceived in my mind". (Meditation II)

This is then the fundamental truth—'Cogito ergo sum' or 'I think, therefore, I am'. This is an immediate apprehension, an intuition, and upon this basis Descartes has tried to deduce every other proposition of his system. Immediately, he derives a criterion of truth and by it proves the existence and veracity of God. Thus gradually he establishes the reality of and distinction between body and mind, the objectivity of the external world, and so on.

Descartes divides ideas into three kinds—innate, adventitious and factitious—and shows that truth lies only in the innate ideas. Adventitious ideas are the ideas of external objects obtained from perception. They are indistinct and confused, and therefore doubtful. Factitious ideas are those of our imagination and, obviously, they are false. Instances of innate ideas are the ideas of 'thing', 'truth', 'perfect being' or 'God', infinity', etc. They are innate not in the sense that we are clearly conscious of them at birth, but as inborn dispositions or potentialities of the mind which become distinct and full-fledged as the mind grows. Their innate character is evidenced by the fact that they cannot be derived from experience, but rather constitute the basis of our experience. Descartes' proofs for the existence of God are a typical instance of the rationalistic procedure.

8. Spinoza

Benedict Spinoza (1632-1677) propounds his view in his works, *On the Improvement of the Understanding* and *Ethics*. He starts with the self-

* The mathematical method finds its classic example in Euclidian geometry. In fact, the rationalist is encouraged by the perfect certainty of mathematical systems and tries to introduce the mathematical method in philosophy in order to attain the same kind of certainty.

evident notion of 'substance' and builds upon it a whole system of thought by logical deduction. He points out that there are four modes of perception or knowledge: (i) Knowledge from hearsay. e.g., my knowledge of my date of birth or parentage and other matters about which I have never felt any doubt; (ii) Knowledge from mere experience. e.g., 'that I shall die...'. 'that oil has the property of feeding fire', and in fact all the practical knowledge of life; (iii) Knowledge by inference based on experience. e.g., the perception that the sun is larger than it appears; (iv) Perception of a thing solely through its essence or through the knowledge of its proximate cause, as when by knowing the essence of mind we know that it is united to the body, or that two and three make five.

Of these four modes, the last alone apprehends the real essence of a thing without the danger of error. This is the method of deduction, by which Spinoza handles the cosmos like a problem in geometry. Every proposition, in his system, has been shown to follow from a preceding one as a corollary follows from a theorem. 'Substance' is defined as anything which can exist or be conceived independently. From this at once follows that it is infinite and one. Because infinite, it has an infinite number of attributes of which only two, thought and extension, are known. But because it is one, these attributes are not independent and separate but only two aspects of the same reality. The apparent multiplicity of finites and freedom of the will are therefore illusory. (See also Chapter XIV).

9. Christian Wolff

Wolff (1679-1754) tries to make a systematic and thoroguh application of the rationalistic method and presents one of the brilliant, though dogmatic, instances of rationalistic metaphysics. He divides the field of knowledge into three segments: rational cosmology, rational psychology and rational theology. In each he starts with certain first principles ('clear and distinct' to reason, i.e., *a priori*) and deduces the whole system as their consequence.

In rational cosmology, some of his premises are: the limited nature of space, the ultimate indivisibility of its units, its beginning in time, etc. Examples of such premises in rational psychology are that the soul is a spiritual substance and that it is indivisible or simple. In rational theology, Wolff deduces the necessary existence and attributes of God from the notion of God as the most real and most perfect being.

10. Hegel and the Hegelians

Hegel upholds that reality is knowable and that through reason. Nay,

reality is reason itself. That is, the methods of the development of reason and reality are indentical. Reason (and therefore reality also) operates dialectically. Hegel starts with the simple notion of 'Being' and by the triadic movement of thesis, antithesis and synthesis, arrives at the all-comprehending notion of Absolute Spirit.

Among his great followers, Bradley (1824-1846) starts with the tacit assumption of the self-evident principle that the essence of reality is freedom from contradiction. On its basis, he demonstrates by logical analysis that the world of our intellectual understanding is only an appearance, because it is full of contradictions. Because non-contradictory, the ultimate reality must be an impersonal, all-comprehensive Absolute Spirit, in which all appearances are harmoniously absorbed.

11. Comments

(1) Rationalism has the obvious merit of being in rigid harmony with the very purpose of truth-seeking. Truth is generally regarded as logical or rational, and it is only too natural to maintain that it is revealed to reason, leaving open to doubt the other sources such as sense and the mystic's intuition. Perception may only be something like dreaming (at least partly) and the mystic's intuition simply an emotional outburst.

(2) Rationalists like Descartes expose with subtle arguments the doubtful nature of sense-experience. Sensations are relative to the observer's position and perspective and often vary from person to person, while the truth is one. Empiricism has a tendency towards scepticism which finds its fruition in David Hume; but scepticism is theoretically self-negating and practically subversive, and cannot therefore be a satisfactory position.

(3) But rationalism, particularly in its extreme form, has been attacked on various grounds. Empiricists like Locke have tried to argue away the notion of innate ideas and to show that all ideas, including even the most abstract, universal and self-evident ones, really spring from experience.

(4) Experience may not prove the *a priori* truths, the self-evident first principles; but, in any case, without it, these cannot be elicited. What is more important, *a priori* principles, apart from experience, cannot by themselves present any knowledge of 'facts' (the existent world). A priori sciences, such as mathematics, are valid in their conceptual spheres, because they only deal with abstract ideas, with forms. The arithmetical integers and the figures of geometry are abstract ideas. But science and philosophy deal with the facts or concrete realities. The self-evidentness of a principle may in fact be a merely subjective feeling, and the rationalist's

logical thought-system may only be a subjective synthesis in which hollow consistency is mistaken for truth.

(5) There is, again, a serious objection from the side of common sense. Sensation works well as a practical guide and has worked from time immemorial. It is by sensation that we distinguish between food and poison; it is on the basis of sensation that we run towards a friend and away from an enemy. To this is added the pragmatic test of truth, viz., that whatever idea works is thereby proved true.

In fine, extreme rationalism, denying altogether the role of experience, is never a widely-held view. But, in its moderate form, which means a synthesis of sense and reason, it has found a great many exponents (the most thorough-going of whom is probably Immanuel Kant).

12. Empiricism

Empiricism is that epistemological position according to which the ultimate source of our ideas is experience. The word 'experience' is of Greek origin and excludes here mystical experience or intuition. Beginning with the Carvakas of ancient India and the Sophists of early Greece, empiricism has a long history extending upto the pragmatists and logical positivists of the current times. It has assumed more or less different forms as the basis of different metaphysical systems. But its general position is that all our elements of knowledge are derived from and reducible to sensations, internal or external. The internal sensations are those of thinking, feeling and willing, and the external sensations are those of external objects, i.e., material bodies, or their qualities such as size, shape, colour, taste and smell.

The empiricist argues that the rationalist's belief in innate ideas is mistaken. Reasoning may tell us what follows from 'X exists' and thus extend our knowledge. But by itself it cannot say whether X in fact exists. The role of reason is one of systematising sensory elements and extending knowledge by logical inferences from them, but it is never a source of ideas. Even the so-called self-evident principles, such as the principles of identity and contradiction, and the definitions and axioms of mathematics and logic are ultimately of an empirical origin.

While rationalism allies philosophy to mathematics and accepts its deductive method, empiricism allies philosophy to natural sciences like physics and biology and considers that the proper method of philosophy is some form of induction. Knowledge is to be attained by observation of facts, and by an analysis of and reflection on the truths of experience.

13. Some great empiricists : Locke

[Empiricism in modern philosophy finds an exponent in its very forerunner, Francis Bacon (1561-1662), who made the first vigorous advocacy for adoption of the inductive method in science and philosophy. Hobbes (1588-1679) applies the empirical method with certain leanings towards rationalism, but in Locke (1632-1704) empiricism attains the status of a systematically pursued and full-fledged empistemology. Locke is followed by Berkeley (1685-1753) and Hume (1711-1776), and then the empirical lineage passes on to recent times through such great philosophers as J.S.Mill (1806-1873).]

The empiricism of John Locke (expounded in his work, *An Eassy Concerning Human Understanding)* has two aspects; negative and positive. Negatively, Locke tries to refute the Cartesian doctrine of innate ideas; and, positively, he propounds his own theory that all ideas are empirical.

His arguments against the doctrine of innate ideas:

(1) If there were innate ideas they must have been universal and present in all minds in the same form. But that is not the case. First, numberless people—e.g., children, savages, idiots and illiterate persons—are quite unaware of the so-called innate ideas, such as the ideas of causality, infinity, eternity and God. Secondly, the ideas of God, morality, laws of thought, etc., assume different forms in different societies, countries and ages. For some, God is much like a man; for others, God is identical with nature, and so on.

(2) On the other hand, universality and sameness are themselves no sufficient proof of innateness. The ideas of the quadrupedness of dogs and the whiteness of milk, for example, are universal and identical for all, but they are not innate. Again, universally accepted ideas may be wrong. Once it was universally believed that the earth is flat and the sun moves round the earth.

(3) The so-called innate ideas are in fact derived from experience. The universality of principles can be explained as a result of inductive generalisation. Particular facts are known long before the general principles; whereas, if they were innate, the reverse would have been the case.

[The child , for example, knows of the sweetness of sugar and the redness of roses long before he knows the law of contradiction. Rather, these laws result from his generalisation from experience. He knows first that sweet is sweet and is not bitter, and then inductively arrives at the laws of identity and contradiction.]

Locke's positive theory :

According to Locke, the mind at birth is like a *tabula rasa* (blank tablet) on which experience gradually writes its impressions. Experience is of two types : 'sensation' and 'reflection'. By sensation we perceive the

external objects through our senses-organs: by reflection we perceive our internal states. Sensation is prior to reflection. We reflect only when our mind is stocked with sensations. "There is nothing in the intellect", says Locke, "which was not previously in the senses."

The mind is passive in receiving sensations, but active in dealing with them. The ideas furnished by experience are all about the qualities of things and are simple. The mind forms 'complex' ideas such as those of 'substance' and 'cause and effect' out of simple ideas by relating, comparing and abstracting from them. Obviously, Locke recognizes a central role of mind in our development of knowledge. He limits his empiricism by leaving room for 'intuition' and 'demonstration' (or inference). He says that our certainty about the existance of external objects is an inference from the facts of sensation; we have intuitive certainty of our own minds, and demonstrative certainty of the existence of God.

14. Berkeley and Hume

George Berkeley accepts the position of Locke, without any fundamental change; but he pushes its implications ahead and thereby develops an idealist metaphysics. To know something is to have an idea of it, and all ideas, according to empiricism, come from experience. Berkeley argues that all ideas are particular, there being no abstract or general ideas, such as the idea of a triangle or of motion in general. Now, the idea of 'matter' or 'external object' is an abstract idea and therefore unintelligible. Hence we cannot assert the existence of matter or of an external world. In brief, 'to exist is to be perceived'. The only things that really exist are God, finite spirits and their ideas.

In Hume empiricism appears with a slightly changed terminology and with its ultimate implications brought into a bolder relief. The elements of all knowledge are, according to him, *perceptions* which are of two kinds: *impressions* and *ideas*. Impressions are the 'sensations, passions and emotions, as they make their first appearance in the soul". They are of two types. Impressions of 'sensation' are the external impressions of things: impressions of 'reflection' are those of internal states and processes.

Ideas are the 'faint images' of impressions in thinking and reasoning. Impressions come with most force and violence, while ideas are feeble. *Impressions of sensation come through our senses, while those of reflection are derived, in a great measure, from our ideas.*[*] Impressions and ideas are simple and disconnected, and become connected by the laws of association, viz., the laws of similarity, contiguity and causality. Ideas

[*] For example, as an impression strikes upon our sense, we perceive heat or cold, pleasure or pain. The copy left by it is an idea. Thus the idea of pleasure or pain produces desire and desire, in turn, produces hope and fear. These are the impressions of reflection

automatically tend to call up ideas of like things, of things contiguous in time and place or related as cause and effect. It is by the union of ideas according to these principles that 'complex ideas' are formed. All knowledge is made up of these simple and complex ideas.

To each idea there is a corresponding impression. No impression, no idea.[5] A blind man, for example, cannot have an idea of colour. All 'necessary' knowledge of facts rests upon the principle of causality. But causal relations are subjective, because no impressions correspond to them. Hence all knowledge of facts is only more or less probable.✞

15. Comments

Empiricism has both merits and demerits, which, obviously, vary inversely with those of rationalism.

(1) Kant pointed out that all knowledge of things begins with experience. No amount of *a priori* deduction is capable of telling us what 'exists' and how. According to him, the empiricist is right in refuting the Cartesian doctrine of innate ideas; but he is mistaken in holding that experience can alone give us knowledge. Knowledge has a unity, and a universal and necessary character. Sensations are particular and discrete. They require to undergo manipulation by our mind or reason in order to develop into knowledge. Kant showed that our mind has certain 'forms' under which the sensory materials are arranged and related, but for which they remain unintelligible and devoid of necessity.

(2) Psychologically, sensations are mere disturbances in our consciousness and develop into knowledge proper only when interpreted by mind.

(3) Hume's laws of association themselves cannot explain the unity of knowledge. It is difficult to understnad how they operate without the 'synthetic activity' of some agent like mind.

(4) There are certain principles, such as the fundamental laws of thought, which cannot be derived from experience, although experience may serve to make us conscious of them. So knowledge is at least partly *a priori*.

(5) Empiricism in its extreme form logically culminates in scepticism, as Hume illustrates. But scepticism is an untenable position and renders life difficult, if not quite impossible. As men of action, we believe in causal connections among phenomena and make use of past experience in anticipating the future.[6]

16. The Critical Theory of Kant

✞ cf. Discussion on scepticism.

Immanuel Kant presents a theory of knowledge which reconciles rationalism and empiricism. According to rationalism, our reason is the only source of certain (indubitable) knowledge. According to empiricism, experience is the only original source of ideas. But Kant maintains that the knowledge of things is a joint product of sense and reason. He distinguishes between the 'form' and the 'matter' of knowledge, and says that while the form is supplied by reason, the matter is supplied by sense. Our mind has the faculties of 'sensibility' and 'understanding', and our knowledge results from the mind's operation on sensory materials with the help of these faculties.[7] In Kant's own words, "our empirical knowledge is made up of what we receive through impressions and of what our own faculty of knowledge (sensible impressions serving merely as the occasion) supplies from itself". (Introduction to his *Critique of Pure Reason*).

Things act upon our senses, and we have sensations (which Kant calls 'intuitions'). Sensations are themselves meaningless and chaotic. They are interpreted by the mind by its 'forms of sensibility', namely, space and time—i.e., they are arranged in an order of space and time. Sensations are thus developed into "percepts". But knowledge is not having a number of unrelated percepts. Knowing is 'judging' in which two or more percepts are related. This relating and synthesizing is done by a higher faculty, viz., understanding. There are twelve concepts or categories of the understanding (corresponding to twelve forms of judgment) such as "substance", "causality", "number", etc., under which the percepts are arranged and related. It is to this role of the understanding that we owe our judgments of the external world as well as our inner self.

Let us, for instance, consider the judgment, "This pen is blue". One could never know that the pen is blue, or even that this particular pen exists, without resorting to experience, directly or indirectly. But an analysis of the content of this judgement will show that it contains something over and above mere empirical datum. The empirical datum, the "matter", that is supplied solely by experience is (when the pen is only *seen*) merely a sensation of colour. This sensation must be brought under the forms of space and time—i.e., the sensation must be "perceived" as being in some place outside my mind and at some time; otherwise it will remain a mere modification of my consciousness, a mere subjective state within my mind. The sensation thus becomes a clear "percept" of a patch of colour. But this percept does not exhaust the whole content of the judgment. When I say that this pen is blue, I mean that it is a 'substance', that it has the 'quality' of being blue, that it is 'one' particular thing, that

it has some 'causal' properties (e.g., it will break the window-pane if thrown against the latter), and so on. Now all these notions of space, time, substance, quality, causality, etc., are, according to Kant, *a priori*, innate, or mental; and any truly knowledge-giving judgment about things must contain some or other of these elements, besides some empirical datum. Thus no genuine piece of knowledge about the world (i.e., about "things' or "objects", and not about abstract principles such as the principles of logic or morals) is possible without a combination of both sensory (*a posteriori*) and mental (*a priori*) elements.

To take another example, let us consider the judgment, "The sun heats the earth". First, we have the sensory stimulations of the heat and light emitted by the sun and the earth's crust. By sensibility, we perceive them as occurring at a certain place in space and at a certain date in time. Thereby we have two percepts—one of the hot sun, and the other of the hot crust of the earth. Next, our understanding "conceives" them under its concepts of cause and effect. Thus this judgment shows itself as containing, inter alia, the *a priori* factor of the notion of causality.

These examples may have shown exactly how Kant's theory contains elements of both rationalism and empiricism, and tries to reconcile these antithetical positions.[8] Kant's fundamental postion is that knowledge is not merely a passive affair of receiving from outside, but also an *active* process of constructing judgments by means of some set intellectual operations on the material received. In this process the mind functions from the very beginning. The process begins with sensation, but is completed by the mind; neither is by itself sufficient. Hence the Kantian dictum: "concepts without percepts are empty, and percepts without concepts are blind".

17. Comments

Kant's theory is called 'critical' because it springs from a criticism or examination of our faculties of knowledge. It may also be called 'synthetic' because it synthesizes empiricism and rationalism (and also intuitionism, in a sense). Through this synthesis, it tries to meet the challenge of the sceptical philosophy of Hume—to show that, althogh the ultimate reality is unknownable, yet some universal and necessary knowledge of the world of experience is possible (cf. Chapter VIII). This attempt at synthesis has been highly appreciated; and indeed Kant has exercised uncommon influence on subsequent thought. It has been very widely held that both rationalism and empiricism are extreme and unsatisfactory positions. Rationalism tends to lose itself in a sort of rigorous formalism, and empiricism in scepticism.

life. Yet the role which Kant assigns to the *a priori* factors of knowledge seems to put him more on the side of the rationalist than of the empiricist, and quite often he is classed as a rationalist.[9]

Kant's theory, however, has been criticised on some serious grounds, such as follows:

(1) It is difficult to understand how the *a priori* forms and concepts which are purely mental can apply to sensations which are produced by non-mental, external objects. Kant's own solution to this problem (cf. his doctrine of schematism) is not quite convincing.

(2) Kant tries to save philosophy from dogmatism and scepticism, but he is himself led into agnosticism, which is not a generally accepted position. Understanding, he says, makes nature. Because things cannot be known except through the *a priori* factors, the *real* nature of things is ever left unkown. We know only the phenomena of 'things-in-themselves' (cf. Chapter VIII). But his critics find his agnostic conclusion illogical. Either the real is known, or its existence cannot be asserted; because, we cannot assert the existence of anything fully unknown.

(3) Kant's position is unsatisfactory to both common sense and science, and is probably no real improvement upon Hume's scepticism. Space and time are apparently objective; and if the categories, particulary those of substance and causality, are no better than mental concepts, all knowledge including science crumbles to the dust. Kant says that the forms and categories do not apply to noumena, but are invariably true of phenomena, so that our knowledge of phenomena is universal and certain. But if the forms and categories are subjective, even their application to phenomena cannot be guaranteed.

(4) Kant leaves a gap between the faculties of mind. He does not explain why understanding, being different from sensibility, could operate upon its products. He also creates a gulf between thought and reality, which is rejected even by his immediate successors. Hegel went so far as to identify reality with thought.

18. Intuitionism

Intuitionism is that theory of epistemology according to which the knowledge of reality can be attained only by intuition and not otherwise. Intuition is said to be a peculiar faculty of mind which stands in sharp contrast with intellect.* Intellect is complex and has two forms—sense and

* In fact all theories of knowledge are divided into two broad groups: Intellectualistic (rationalism etc.) and Non-intellectualistic (intuitionism etc.).

reason. In both, it works through a medium: its modus operandi is indirect. But in intuition the subject comes into a direct communion with the object. Directness or immediacy is the essence of intuition and gives it a unique character.

Intuitionism is sometimes indentified with 'mysticism', but it is more usual to take the latter as a religious version of the former. The word 'intuition' is also taken to denote *any* kind of direct awareness: and, in this wide sense, intitution of some kind or other is there in every theory of knowledge. But, as a method of knowing 'the real' as opposed to what is merely phenomenal, it means a sort of sympathetic insight into the object, a direct and deep-level contact with the latter In this special sense intuition is not merely non-intellectual, but supra-intellectual; not non-logical, but supra-logical. It is a method which takes the mind to an incomparably higher level of realisation above sense and reason. Between the subject and the object nothing stands, and the experience remains more or less indescribable in ordinary conceptual terms.

19. Bergson's view

Intuitionism in Western thought first appears in Neo-Platonism; but the history of philosophy is almost entirely intellectualistic. In recent times, however, it receives a vigorous advocacy from the great French philosopher, Henri Bergson. According to Bergson, reality is of the nature of a vital surge which is in a ceaseless flux having no spatio-temporal or other distinctions or breaks. Our intellect operates cinematographically, taking partial, static and discrete views of its object and gives, therefore, only a distorted picture of the real. The *elan vital* is completely devoid of staticity and admits of no analysis. But intellect is discursive and analytical, expressing its object in static concepts. Hence it simply goes round the real, 'instead of entering into it'.

Reality can be known only by intuition which alone can enter into "the very inwardness of life." He defines intuition as a kind of intellectual sympathy. "By intuition", says he, "I mean instinct that becomes disinterested, self-conscious, capable of reflecting upon its object and enlarging it indefinitely". Intellect has been evolved for the purposes of action: we cannot act except in a world of fixed and finite particulars. But intuition takes us above all practical interests and yields a deep and direct apprehension of the inner fleeting essence of the real.

20. Mysticism

Mysticism is sometimes understood as having no difference from

Mysticism is sometimes understood as having no difference from intuitionism. But, more usually, it is taken in a restricted sense and means the theory according to which the ultimate reality or God is known through a supernatural and obscure sort of experience. Thus, mysticism has a theological or theosophical colour about it. In Muslim philosophy it is called 'sufism'. Mystics have shown a general disregard for our sense and reason, and also for the world known through them. They have generally been unorthodox, not having much regard for any authority. They have upheld the possibility of coming into direct communion with God or the Supreme Being who has often been identified with Nature (Pantheism).

21. Criticism of intuitionism and mysticism

(1) Intuition in a wider sense, i.e., as simply a direct and immediate type of cognition, is present in all forms of knowledge. The rationalist's comprehension of his first principles is direct and immediate and is therefore intuitive. For the same reason, sensation too is a kind of intuition. Intuition or insight plays a very important role in our practical life. We have moral intuitions, and our aesthetic experience, our perception of beauty, is intuitive. But intuition, as defined by the intuitionists, can hardly be given the status to which they entitle it. Intuition may supplement intellect by providing a deeper understanding of the reality outlined by intellect, but can never supplant it. In a sense, all indubitable knowledge is ultimately rational; reason is the final court of appeal.

(2) Mystical intuition, unlike scientific observation or logical demonstration, is exclusively private and inexpressible, and is not amenable to proof or disproof. Mystics generally claim that their experiences are possible only at a certain level of spiritual development, and that in some of these experiences the subject and the object lose their differences and become one. All these drift intuitionism too far from common sense and science. Left to such an esoteric method whose approach and attainment are both private, philosophy virtually commits suicide. There being no general standard, intuitions may contradict one another and yet claim to be equally true, which is absurd.

(3) Psychologists generally have thrown doubt upon the normalcy of mystical expericne which has been likened to a state of intoxication. The mystics do not and cannot explain how the soul's union with God or reality is effected. Such a union is obnoxious to the critical, scientific spirit. Knowing is not possible without a distinction between subject and object: we do not taste sugar by becoming sugar.

(4) Bergson seems to be moving in a vicious circle. He discredits

intellect with the intellect itself. His arguments and the whole exposition of his philosophy apply intellectual tools. His own definiton of intuition seems to make it nothing supra-rational, but rather something infra-rational. He at once recognises intellectual knowledge as alone useful and yet denies validity to it. This seems illogical. Reality may not be divisible into as rigidly distinct parts as any extreme intellectualism might suppose; nevertheless it remains true that reality cannot be understood or described without making use of distinct, well-defined concepts. In a discussion on mysticism Bertrand Russell contends that "insight, untested or unsupported, is an insufficient guarantee of truth, in spite of the fact that much of the most important truth is first suggested by its means." Philosophy is a highly refined pursuit which demands "a certain aloofness from the life of instinct." The true objects of philosophy are such that "it is here, more almost than anywhere else, that intellect proves superior to intuition."[10]

NOTES

1. Knowledge : Although we claim to have knowledge about numberless things, it is not easy to have knowledge about knowledge. The word 'knowledge' may roughly be said to mean the state of having a belief supported by adequate evidence. Some philosophers have, however, given a contextual definition (or definition in use) of the word. To give a contextual definiton of a word is to state the meaning of the sentence in which it occours. Thus we give a contextual definition of 'brother' if we say: 'X is the brother of Y' means 'X is a male and has the same parents as Y'. In the same way, Ayer, for example, defines knowledge as having the right to be sure. According to him, "the necessary and sufficient conditions for knowing that something is the case are first that what one is said to know be true, secondly that one be sure of it, and thirdly that one should have the right to be sure". (*The Problem of Knowledge* p.35).

R.M. Chisholm, however, takes a more liberal view (in his *Perceiving*) and defines knowledge as follows :

'S knows that h (e.g., that the earth is round)' means—

(1) S accepts h

(2) S has adequate evidence for h, and

(3) h is true.

Thus, according to Chisholm, in order that we can claim that we 'know', for example, that the earth is round, we need not be *sure* that the proposition is true; it is enough if we accept the proposition because we have just adequate evidence for it. In order to be sure or 'certain' we should have more than adequate evidence. On the other hand, the propositon must *actually* be true. If we have adequate or more than adequate evidence for a propositon which is actually false, we have the right to *claim* that we know (until we know further that it *is* false); but we do not really know.

It must, however, be noted that both of these definitions clearly distinguish knowledge from *belief*. In order to believe that so-and-so is the case (e.g., that the Mars is inhabited) we need not have adequate evidence. Of course, if we have no evidence whatever, we have a mere 'faith'; yet we are justified in entertaining a belief if we have just *some* eviedenc. Thus there is an epistemic hierarchy with faith as its lowest and necessity as its highest stratum: Faith, Belief, Knowledge, Certainty and Necessity.

The main theoretic enterprise of science and philosophy is to determine which beliefs are knowledge and which are not, or to rise from the stratum of faith or belief to that of knowledge and upwards, if possible.

And the central problem of epistemology is to formulate the necessary and sufficient conditions of knowledge.

2. Knowledge vs. Explanation : There is a clear distinction between knowledge and explanation. They overlap, and yet are not identical. Knowledge is a looser and wider term than explanation. We, for instance, know that the sun is a great star, or that water is a chemical compound of hydrogen and oxygen. Thus taken, we have undoubtedly plenty of knowledge. But explanation is a matter of a much higher order. It seeks, not to give us a loose and partial conception of something, but to enlighten us more or less fully about its 'that, what, how and why'.*

Knowledge may proceed, more or less doubtfully, as far as the 'how'. But the 'why' is the exclusive prerogative of explanation. Knowledge may say that a thing is there, what it is, and how or through what antecedents it is. there and is what it is. But we do not have explanation (more precisely, explanation in its complete form) until the 'why' is given. For example, we know (a) that there is a thunder, (b) that it is a strong auditory sensation, and (c) that it is produced by high air-waves. But an 'explanation' of the phenomenon will go much further. The phenomenon is not fully explained, and there is no complete satisfaction, until it is traced back to something of an ultimate character.

In science, knowledge gives the 'that' and the 'what' of things, while explanation does not go beyond the 'how'. Scientific explanation involves both deduction and induction, and ends in giving the laws of phenomena. Science explains things by discovering their causal connections, that is, by pointing out their invariable antecedents. Such knowledge and explanation are no doubt of immense practical value, but incapable of yielding complete theoretic satisfaction. In the eye of philosophy, scientific explanation—the answer to the question 'how'— is only a higher stage of knowledge; it is virtually no explanation. It has, therefore, rightly been said that while science 'discovers', philosophy explains.

The peculiar interest of philosophy (at least traditional philosophy) lies in the ultimate 'why' of things. To take up the above example, in explaining thunder, science may go on piling antecedents upon antecedents, but the ultimate ground may ever remain undiscovered, so long as we remain confined to bare observation and experiment. Possibly, the phenomenon is adequately explained only when it is shown to be 'necessary' or to derive from some 'necessary' being. The most brilliant instances of attempt at this type of (philosophical) explanation are

* 'That'=existence, 'what'=essence; 'how'=cause or immediate antecedent; 'why'=reason or the ultimate ground.

probably furnished by Spinoza and Hegel.

This indicates that explanation in its perfect (or philosophical) form is deductive, and hence the universe, to be explicable, must be a rational system. But how could it then be 'concrete'? Can concrete things constitute a system analogous to the geometrical system? These are questions of basic interest, but we cannot enter into them here. It may, however, be noted that unless the world proves to be a deductive system—i.e., a system whose elements can be logically deduced from some ultimate necessary essence—we must rest content only with some sort of *knowledge* of it, and ever will it remain inexplicable. Existence or reality, in that case, will remain an ultimate mystery.

3. Categories : In describing or explaining things we apply certain general notions. These notions are called the 'categories of knowledge'. The word 'category' (Gr. 'kategoria') ordinarily means a class or whatever may be predicated of a class. Aristotle used the word to mean 'kinds of predicate' or 'kinds of being', and enumerated ten categories—substance, quantity, quality, relation, place, time, position, state, action and passion. These are at once so many kinds of predicate and kinds of the ways things are. First, if we examine our predicates we shall find that fundmentally they are of ten different types. That is, we predicate of a subject either some type of substantiality or some quantity or some quality, and so on. But this logical operation is not arbitrary but has a real metaphysical basis. In fact, these ten categories are ten different modes of being. That is, things 'are' by being some substance, by having some quantity or quality, by being in some place or time and so forth.

In thinking of something we *judge*, and judgment, according to Aristotle, is a matter of predication (relating two terms as subject and predicate). In predicating we assert characteristics which are divisible into ten groups. The ten categories represent these ten groups. Thus it is evident that, according to Aristotle, the categories have both a logical and a metaphysical significance, and these two aspects are inseparable.

Kant differed from Aristotle and maintained that the categories have no metaphysical significance. They are only so many general concepts by which our understanding interprets the perceptual materials of knowledge. Categories have only a cognitive import and apply only to the empirical, phenomenal world (See his theory of knowledge in this chapter.)

Philosophers are not always unanimous as to the nature or number of categories. As against Aristotle's ten, Kant mentions twelve categories, and Hegel's system comprises a little more or less than two hundred and sixty. As for the nature of a category, the first important distinction is the

one between scientific categories and the purely philosophical ones. Philosophical categories (as, for instance, those on Aristotle's list) are said to be 'logical types' and not classes which are only 'natural kinds'. As Passmore observes, "category-distinctions are established by philosophical reasoning, not by field-work" (i.e., empirical investigation), and categorial questions "can only be settled by argument, which involves considerations of a formal-logical kind." *(Philosophical Reasoning*, pp. 120,128) In fact, however., 'category' is somewhat a vague term: not all philosophers see, or find it easy to see, a clear boundary between categories and classes. In a broader sense, a category is any general notion or class-concept of a fundamental nature by which we think of things or interpret phenomena. In this sense, even such terms as matter, energy, life, mind. evolution, law, etc. are to be reckoned as categories. By scientific or philosophical explanation, we shall then understand the subsumption of facts under a suitable category. For example, traditional materialism explains all things by the category of matter, while traditional psychology explains our inner states and processes by the category of soul or mind.

4. Thing, Substance and Quality : These are three fundatmental categories. Objects of knowledge are usually brought under two broad heads. We know either things or 'facts' and ideas or 'principles'. Things or facts 'exist' or 'are there', whereas principles are purely a matter of thought: they are *about* facts but fundamentally different from them. When, for example, we know that sugar is sweet, or that atoms are divisible, we know a fact; but when we know that falsehood is immoral or that parallel straight lines never meet, we know a principle.

Then, what is a thing? A thing is a concrete object, a substance possessed of attributes. Thus a thing has two different but inseparable aspects of its total being. A mango, for instance, has certain perceivable attributes. It has a certain shape, a certain size, a weight, a colour and a taste; it is hard and either sweet or sour. But it is not a mere aggregate or bundle of these qualities. It is a 'substance' in addition to these qualities; it is a lump of matter which possesses and holds together these diverse attributes. Of course, the substance of a thing need not be material. Human soul, for example, is believed to be a spiritual substance essentially different from matter.

Here we have the age-old distinction between thing and quality, or substance and attribute, or substantive and adjective. (It must be noted that here the word 'thing' has been used in two senses. It has one more sense, the widest of its senses, in which it means whatever is there or whatever is thought of, either abstract or concrete.) Of any concrete entity, its

substance is the inner essence or the basic reality, while the attributes are its outer manifestations. The substance is fundamental and more or less permanent, while the attributes are relatively inessential and more or less fleeting and variable.

In brief, the notion of substance contains the idea of something (i) which underlies the qualities but is quite different from them, (ii) which remains permanent although the qualities change, and (iii) which is a real seat of energy and centre of activity. It is the substance which conditions the qualities and gives them their unity and continuity.

Such, for the most part, is the popular and the older conception of substance. But many philosophers have doubted this notion of substance and its relation to qualities, or even denied the existence of substance either material or spiritual. Berkeley denied the existence of matter, and Hume of both matter and mind. Locke made a distinction between primary and secondary qualities and regarded the sceondary qualities as subjective. Of late, Bradley has tried to show that the dualism of substance and attribute involves contradictions and is therefore illusory. As to the precise nature or number of ultimate substances, there is a great diversity of opinion among philosophers.

CHAPTER VII

THEORIES OF TRUTH

1. The Problem—Formal and Material truth:

The problem of truth is one of the central problems of logic and epistemology. Truth ultimately means consistency or harmony and has two broad aspects; or rather, there are two forms of truth: formal and material. A judgment is formally true when it has a harmony within itself, without any necessary reference to the facts. For example, the judgment 'Mr. X is a shrew' is formally untrue, since there is an obvious contradiction between its subject and predicate. But the judgment 'Mr. X lives in the Mars' is formally ture, even though we know of none like him. An argument lacks formal truth when its premise and conclusion cannot be accepted together or have no necessary relation. It is formally true only when its premise and conclusion can be and must be accepted together. On the other hand, a judgment is materially true when, besides being formally true, it is consistent with the facts. Formal truth is generally called 'validity', while material truth is simply called 'truth'.

The problem of validity is the subject-matter of formal logic. At present we are concerned with the problem of truth.The question is: What are the marks of a true judgment which distinguish it from a false one? What is the test or criterion of truth? Philosophically, there have been different answers; although, popularly, almost all of them have combined to constitute a practical guide.

2. The test of Authority*

According to it, the truth or falsity of judgments (at least of some judgments is to be determined with reference to some authority. A judgment is true if it either directly comes from that authority, or is consistent with those already accepted upon that authority. A most familiar role of this test is to be found among children who accept without question the opinions of their superiors, particularly their parents and teachers. This

* Vide—discussion on authoritarianism. Ch.VI.

test is largely applied in religion. In the sphere of critical inquiry, it has a wide application in history, and then a limited application in philosophy. Because of the very nature of the case, the historian depends upon the records of past historians. The philosopher, having the entire realm of being as his subject of study, has to look up to the sciences and other reliable sources of knowledge, if any, for data which he is to analyse and reflect upon. This is true even of the sciences in relation to one another. Because fruitful investigation needs specialisation, any inquiry, whether scientific or philosophical, must rest partially upon some authority or other.

Yet, there is a difference. There are certain tests of authority itself, viz., number, duration and prestige. While ordinary people accept an authority without a careful weighing of the relative merits of these tests and apply them more or less uncritically, science and philosophy do not share this attitude. They rely more on prestige than the other tests. But because the prestige of an authority depends upon its adoption of some nonauthoritarian critical method (reason or experience), science and philosophy cannot strictly be said to accept any authority as such.

3. Comments

(1) The test of authority seems indispensable, and if it is an evil, it is a necessary evil. It is not humanly possilbe for a single individual to be a master of all trades, to survey every field of knowledge for himself. Without a dependence upon some authority, both life and theory become impossible. The question, therefore, is not whether authority, but what authority.

(2) But it is a harmful attitude to accept blindly any authority whatsoever. Uncritical dependence upon one authority disposes a man to depend upon another at ease. Authoritarianism develops, particularly among commoners, a sort of mental lethargy, dogmatism and fanatical defence of their respective authorities. This is pernicious and has actually stained the pages of history with enough human blood.

(3) Naturally, authoritarianism finds a special defence among religious believers and mystics who uphold that the ultimate truth about God or reality can be attained only through a special supra-rational faculty of the mind, viz., intuition. But whether there is any such faculty is a matter of controversy. The more usual attitude of truth-seekers is intellectual, which demands even of intuitive truths an intellectual scrutiny. For the intellectualists, truth is essentially rational and universal. To make truth the private property of a few mystics or prophets is to leave man in an endless conflict of ideas which often leads to undesirable consequences.

(4) Authority is not an *ultimate* test. It is only a guarantee of truth tested otherwise (by correspondence or coherence, etc.). When, for example, we accept the judgment that 'atoms are divisible' on the authority of the physicist, we do not mean that the judgment is true simply because it is the opinion of the physicist. We accept the judgment because we are convinced that the physicist's verdict is not false and that there is really a fact corresponding to the judgment.

4. The test of self-evidence or obviousness

A judgment, according to this test, is true, because its truth is apparent, self-evident or obvious; no reasoning or reference to the facts is necessary. There are at least some judgments—e.g. the primary laws of thought or the axioms of mathematics—which neither can nor require to be proved. For example, the principle that nothing can be both black and not black, or that apart is always less than the whole, is obviously true. By obviousness is not meant the subjective or ordinary feeling of clearness of a layman, but a higher sort of insight which cannot be discredited.

All *a priori* sciences like mathematics and logic are built upon certain basic principles which are accepted as self-evident. To this extent, this test has a general acceptance. But the test is extended not only to such *a priori* principles, but even to judgments about facts. To a realist, such as George Santayana for instance, sensations are self-evident and the sensible world real. Descartes and Spinoza regarded clearness and distinctness as the ultimate test of truth.[1] Any one having a true idea is at the same time aware that it is a true idea. "Just as light reveals both itself and darkness, so truth is the standard of itself and of the false." (Spinoza)

5. Comments

(1) Our awareness of a self-evident propostion is usually classed as an intuition. But it has a great danger of leading us to subjectivism. There is hardly any agreement among thinkers as to which propositions are really self-evident. As Hobbes pointed out, this criterion blurs the distinction between a mere feeling of clearness and knowledge proper.

(2) Self-evident propositions are not always true. There was a time when it was evident that the earth is flat and the centre of the solar system. The existence of God is sun-clear to the common man of faith. But the critical mind knows that while the first proposition is no longer true, the second is extremely controversial.

(3) But self-evidence, rightly understood, appears to be the *basic* test of truth. It has a great role in life, and is foundational to all truth-seeking.

in virtue of the very nature of the case. It is the only ultimate guarantee. whether ideas are empirical or rational. The truth of perceptions cannot be proved; and the *a priori* operations of reason which are deductive must start (as in mathematics or Spinoza's system) with some ultimate premises which are acceptable only on account of their self-evidentness. What is necessary is to take care as to which propositions are realy self-evident and which are not.

(4) Further, although self-evidence is the only test or the sole guarantee of fundamental truths, it is by no means the criterion of *all* truths. There are judgments which are true without being self-evident. For instance, the conclusion of a valid argument with a true premise is necessarily true. but its truth may not be self-evident, particularly when the argument is long and complex.

6. The test of coherence or consistency

According to the test of coherence, a judgment is true if it coheres or consists with a judgment or system of judgments already proved to be true. Coherence is that relation between judgments in virtue of which 'they are relevant to each other and may logically be asserted together'. Let us say. for instance. that the judgments, 'Air is essential to life' and 'The moon is without air', are already known to be true. Then. a third judgment. 'The moon is without living beings' is also true because it harmonises with and is implied by those true judgments. The judgment. 'The moon is inhabited by living beings' must be rejected as false. because it contradicts the known truths.

Coherence is a general test of truth for all *a priori* formal sciences like logic and mathematics. The truth of a logical principle, e.g.. Aristotle's dictum, depends upon the fundamental laws of thought universally accepted as true. The proof of a geometrical theore[illegible]sists in showing its consistency with one or more already accepted theorems. In the metaphysical region. the coherence test is upheld, broadly speaking, by the rationalists and the Monistic or Absolutistic idealists. (See—Monism and Idealism). The method of rationalism being deductive, the propositions of that a rationalistic system can be tested only by comparing them. directly or indirectly, with its fundamental premises. The Absolutists like Hegel, Bradley and Bosanquet maintain that reality is one absolute whole, and that a fragment of it taken apart from the whole is only an appearance. No isolated fact being absolutely real, no judgment about such a fact can be absolutely true. Absolute truth belongs only to our judgments about the whole. i.e.. to a 'system' of judgments. and not to any isolated judgment.

A particular judgment is true or false according as it coheres or does not cohere with that system, and is more or less true in accordance with the degree of coherence.

7. Comments

(1) Conceptions about the test of truth are usually determined by those about the origin of knowledge and about the nature of the real. Thus, while rationalism and monistic idealism defend the test of coherence, empiricism and realism attack it. Accroding to the latter, since the objects of knowledge are real and we know them through experience, the only way of testing a judgment is to compare it with objects and see if there is a correspondence between them. In practice, we are more concerned with finite particulars than with any Absolute; and life becomes impossible or charmless, if our judgments about particulars are condemned as more or less untrue.

(2) Bare consistency is not always a reliable test. As the pragmatists point out, we may have a perfectly consistent system of erroneous judgments.[2] Parties to a suit in a court of law often cook up consistent stories in support of their allegations (such highly consistent systems as those of Spinoza., Leibniz and Wolff are often criticised as purely speculative).

(3) C.E.M. Joad points out that the idealists' application of the coherence test renders all judgments of perception and history doubtful, since such judgments are always about finite particulars. Again, the test of coherence is self-stultifying. The judgment that truth means coherence is not obviously the 'whole truth' of the idealists, and is therefore only partly true.

These are some of the objections against the test of coherence. Coherence, however, cannot be rejected as absolutely useless. For the *a priori* formal sciences it is necessarily one ultimate test (supplementary to the more fundamental criterion of self-evidence). Natural sciences and common sense generally accept the test of correspondence. But every judgment cannot be examined by direct observation, and the only workable alternative left to us is to compare it with those already accepted as true. Any set of true judgments, besides having facts corresponding to them, must be coherent with one another. Coherence thus seems to constitute an element in every test of truth.

8. The test of correspondence

According to this test, a judgment or proposition is true if and only if it corresponds to the facts or agrees with reality. For example, the judgment, 'The sun is hot' or 'Honey is sweet' is true because it conforms

to the actual situation of the sun's being hot or of honey's being sweet. A judgment or proposition purports to state what is the case and is true. if what is stated to be the case is really the case. In Russell's words, "a belief is true when there is a corresponding fact, and is false when there is no corresponding fact."[3]

Aristotle is perhaps the earliest exponent of the Correspondence theory. As he said: "To say of what is that it is not, or of what is not that is, is false; while to say of what is that it is, and of what is not that it is not, is true." The theory is usually upheld by the empiricists and the realists, and rests upon certain presuppositions. It is supposed that the knowing subject and the object known are distinct and independent, that both are real, and that knowing is a direct or indirect contact between the two in which the object is somehow copied or represented in the subject's mind. The particular finite objects of perception, the constitutent parts of the world, are real as well as the 'whole' which they constitute; and our ideas of them are not innate or *a priori* properties of mind, but must be acquired through a communion with them. A correspondence or agreement between ideas on the one hand and facts on the other is, therefore, alone what constitutes the truth of a propositon.

9. Comments

The theory of correspondence as the nature or test of truth is commonsensical and, as Russell says, "has on the whole been commonest among philosophers." (*Problems*, p.121) It is, however, not without critics, and arguments have been offered both in favour of and against it.

(1) The correspondence test obviously does not extend to our judgments about *a priori* principles to which no brute facts correspond. Pure mathematics, for instance, does not test its propositions by a reference to the facts. The application of this test is limited to the domain of experience or empirical demonstration.

(2) Monistic idealism rejects this test, along with its rejection of the realistic view of perception upon which the test depends, as too naive. Relations between finites, according to the realist, are external, so that we can have a more or less adequate knowledge of a particular object without a necessary reference to the entire realm of being. The monist denies this and contends that judgments about any part of the real are never fully true.

(3) The pragmatists argue that correspondence is an unpracticable test. If we know the reality directly, it is unnecessary to have a belief about it and claim truth for it; if we do not, it is impossible to compare our belief and reality. On this test, therefore, our judgments remain either gratuitious

or unverified.

But a close examination shows that correspondence is invariably an ultimate test of truth with regard to judgments about 'facts'. Its claim is obviously justified, if we agree to the realistic version of the world and experience. But, even if we disagree, the claim of correspondence is not adversely affected. This is sufficiently warranted by the very simple logic of knowledge. Knowledge necessarily implies a distinction between a subject and an object, the knower and the known. True knowledge can therefore mean nothing save a correspondence, of some sort or other, between the two. The pragmatist's criticism results only from a misunderstanding about the nature and purpose of judgments.

Finally, therefore, correspondence seems to be one of the basic criteria of our knowledge of 'facts'. Other tests, coherence in particular, can supplement it, but never supplant it. How the correspondence between ideas which are mental and facts which are non-mental is effected, may remain an open question. But, on the one hand, that does not prejudice its status as a criterion; on the other, that the correspondence is somehow effected is amply evidenced by the role of judgments in our life and science. In fact, correspondence, subserved by self-evidence and coherence, is the complete test of truth.

10. The pragmatic test of truth

Pragmatism advocated by Pierce, James, Schiller and Dewey, rejects the traditional conceptions of truth and advances instead a fresh theory. There is a distinction, as we shall see, between the essence and the test of truth. According to the pragmatist, in both respects, truth means utility or workability. He points out that coherence cannot be a test of truth, because it is possible to have a coherent system of false judgments. The test of correspondence also does not work. If we know things directly it is gratuitous to have a judgment about them and claim it to be true. If we do not know them directly, whether an idea corresponds to reality or not cannot be ascertained, since no comparison between the idea and the object is possible. The only test left is, therefore, workability.

The true, as William James puts it, "is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving". But satisfactory working or successful leading is not only the test of truth, it is the very *essence* of truth. "The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true or made true by events."[4] Originally no ideas are either true or false. They become true by the process of verification. Ideas are instruments or plans

of action, and become true or false according as they satisfy or do not satisfy the purpose in hand. A man, for instance, is thirsty and, finding a quantity of transparent liquid in a cup on the nearby table, judges it to be water. He steps ahead, drinks the content of the cup and his thirst is quenched. His judgment is verified: it is true.

11. Comments

(1) The pragmatic view of truth is apparently queer and has (perhaps rightly) suffered a storm of criticisms from many quarters. Its answer to both aspects of the problem of truth seems unsatisfactory. First, satisfactory working cannot as such be a *test* of truth. True ideas do not always satisfy, nor does a false idea always fail to.

(2) Secondly, even if true ideas were always satisfactory, satisfactoriness would not itself constitute the *essence* of truth. In fact, pragmatism confuses between the 'test' and the 'essence' of truth. Truth is an absolute intrinsic property of ideas possessed without relations to any extrinsic end, human or otherwise.

(3) Pragmatism confuses also between 'truth' and 'good'. If ideas are plans of action, they may be good or bad, but not true or false. Moreover, even if this confusion were ignored, difficulties would remain as to what is good, which is itself a problem no smaller than the problem of truth.

(4) Russell points out that it is hardly possible to determine by the pragmatic test the truth-value of a propositon, e.g. the proposition, 'Columbus crossed the Atlantic in 1492' or 'I had coffee this morning with my breakfast'. We cannot pass a judgment unless we have considered, first, the general nature of good, and secondly, the observable consequences of holding the propositon. This will logically involve an infinite regress. "Surely", says Russell, "this is absurd."[5]

(5) Pragmatism reminds us of the Protagorean maxim that 'man is the measure of all things' and seems to lead to a scepticism of that sort. Certain conclusions necessarily follow from the pragmatic view. If truth grows through verification then no ideas, as the pragmatist himself admits, is either fully true or fully untrue, not excluding even scientific laws. Truth or falsity of ideas will then change with the nature of the purpose in hand, and may vary from individual to individual. Referring to pragmatism, W. James exclaims, 'How democratic she is!' But truth or falsity is absolute and independent, and has little to do with democracy. Pragmatism seems to make too much of our practical ends, forgetting that truth itself is an end of our life, if not the highest end.

12. Conclusion

Two things are quite obvious: (a) the controversy over the problem of truth may be considerably eased up, and many absurdities avoided, if the problem itself is rightly understood; and (b) the problem deserves an independent *a priori* treatment. The problem of truth is in fact logically prior to that the origin or verification of ideas and, therefore, a solution of the latter may depend upon the solution of the former, but not conversely.

The problem, as already indicated, has two aspects: that of the 'essence' and that of the 'test' of truth. There is a clear distinction between 'being true' and 'being known to be true'. The essence of truth is just what is *meant* by the word 'truth.' It consists in the minimum conditions that a judgment must fulfil in order to 'be' true. The test of truth simply means the method by which a judgment is 'known' to be true.

We have judgments about two altogether different types of things: (i) principles, and (ii) facts. Principles are the *a priori* and abstract ideas of pure thought, while facts are the concrete phenomena or real situations in the world. Principles do not, while facts do, exist. Principles simply 'are', while facts 'are there'. Now, as for the essence of the truth of our judgments about principles, we should regard such judgments as capable of validity (formal truth) rather than truth (material truth). There are no objects which they copy or agree with. Objects or facts more or less agree with them; but they are not dependent on an agreement with the facts. There is actually nothing like a triangle in the concrete world; there are only triangular bodies or shapes. Hence, for example, the principle that the three angles of a taringle are equal to two right angles is valid independently of any reference to the facts.

Now for the *test* of such judgments. Principles are either primary, or secondary or derivative. The only test of primary principles is 'self-evidence'. That of the secondary principles is either self-evidence or coherence, or both. The truth of a secondary principle may not be self-evident or obvious. In such a case, (and this is usually the case), the judgment is accepted only if it is found to be coherent with those already accepted as true.

The *essence* of the truth of judgments about facts will consist in their correspondence. If facts are really there (and are not mere ideas in our mind), the propriety of this difinition of the essence of the truth of our judgments about them cannot possibly be doubted. That the judgment 'London is bigger than Dhaka' is true obviously means: there is a fact (London's being bigger than Dhaka) corresponding to the judgment. Could it 'mean' anything else?

There is, of course, no such simple answer to the question of *test*. How can we 'know' or be convinced that this judgment is true? (1) We may personally survey both London and Dhaka. We may call it 'the test of direct experience'. (2) Failing this, we may compare it with other judgments already known to be true and accept it because it is coherent with them. This is the test of coherence.

These are, apparently, the only two basic tests. But we have also another test, viz., the test of authority. This is widely used, but is only of a secondary nature. It is ultimately based upon one or other of the previous tests. But the pragmatic criterion is, first, only a *test* of truth, having no bearing on the essence of truth. Secondly, even as a test of truth it is not quite satisfactory. It may be adopted only as a measure of prudence for practical purposes, and only when the other tests are, by the nature of the case, of no avail.

CHAPTER VIII

THE NATURE, OBJECT AND EXTENT OF KNOWLEDGE

1. The problem stated

If such and such are the sources of ideas and their tests of truth, two broad questions arise. First, is knowledge ultimately possible at all? If possible, how far? What are its limits, if any? Secondly, if knowledge is possible, what is its exact nature? That is, what exactly do we achieve or possess when we feel that we know? Do we know only our own ideas, or a reality beyond them?

These questions are obviously of an ultimate order, and our answers to them reflect the net profit or loss in our search for truth. And, again, the answers are various. As to the first question, we have, on the one hand, the general conviction, popular and scientific, that truth is attainable. On the other, there is the sceptical trend which, partly or wholly, doubts that possibility. There is no general name for the first position, except perhaps what Kant gave it by way of disapproval, viz., Dogmatism. Dogmatically or not, man began philosophy and science with the belief and hope that reality is knowable; and the same has persistently set him think amidst all failures and discouragements. The latter position, however, is called scepticism, and there are intermediate positions between these extremes, such as agnosticism and positivism.

As to the second question, there are two broad opposite answers, viz., idealism and realism. While idealism denies, realism affirms the existence of an extra-mental reality as the object of our knowledge.

2. Scepticism

Scepticism is that epistemological position according to which 'certain' knowledge is not attainable—or, if attainable, we cannot know that. True knowledge is an ideal duplication of objects, and is universal and necessary. It corresponds exactly to objects and is such that every rational being is bound to accept it. Such knwoledge, says the sceptic, is not attainable. No dobut we have a certain kind of knowledge in the sense

that we have ideas of things. But there are doubts as to whether this knowledge represents the real nature of things adequately, or has a fixed character irrespective of our individual or other differences.

Scepticism is known to have its beginning with the Sophists of early Greece (about the 3rd century B.C.). They were followed by a whole 'school' of sceptics led by Pyrrho. Of modern sceptics, David Hume takes the lead, and is followed prominently by J.S.Mill and Alexander Bain.

3. Arguments for scepticism :

Sceptics of different ages have offered several arguments which may be summarised under four heads as follows :

(a) **The historical argument :** Throughout the history of thought the experts in every field, not to speak of laymen, have differed widely in their opinions. Tussles have been persistent, for example, between idealism and materialism, between theism and atheism. It becomes only too evident from this that certain knowledge or the final solution of theoretic problems is beyond human abilities.

(b) **The dialectical argument :** In the very nature of the case, reason is incapable of solving the ultimate problems. In its attempt to deal with them, reason is faced with contradictions or antinomies which cannot be resolved. Pyrrho and his followers made use of Zeno's antinomies as a proof for their sceptical position. Zeno, of the Eleatic school, showed that motion and multiplicity are impossible because their conceptions involve insoluble contradictions.[1] Many antinomies have been developed by philosophers and the sceptic refers to them to show that no solution is possible of the ultimate issues.

(c) **The pysiological argument :** Our experiences of the external world necessarily involve the mediation of our physiological system. We cannot see the colours without eyes, perceive a smell without the nose, and so on. Hence there are grave doubts as to whether the world is correctly mirrored in our experiences.

(d) **The psychological argument :** The universal and necessary character of knowledge is not guaranteed by the psychology of experience. We live in an eternal 'now', i.e., our experiences are always of the present. We have our past experiences in memory and the future ones in anticipation. But memory is fallible, and anticipation is based upon the laws of uniformity of nature and causation, which are not themselves proved beyond doubt.

4. David Hume

Hume deserves special consideration as the most ingenious and thorough-going of all modern sceptics.He thrives upon the empiricism of John Locke, and pushes it forward to its farthest limits. He contends that if experience is the only source of knowledge, all the positive knowledge that we have is reducible to impressions and ideas. We cannot logically go beyond them. Hence, there is no knowledge of matter, mind, God or even of causality. The causal law is a mere belief, since there is no impression corresponding to it. But the essential marks of scientific knowledge, viz., universality and necessity, depend upon the causal law. We cannot be certain about our anticipations without it. Hence there is no universal and necessary knowledge in science; its generalisations are never fully certain but only more or less probable.

Hume, however, makes a distinction (known as "Hume's fork") between 'relations of ideas' and 'matters of fact' as two different kinds of objects of knowledge. Such abstract sciences as mathematics and logic deal with relations of ideas, and the truth or falsity of their judgments is altogether beyond doubt. It is, for example, fully certain that 5x3 is equal to 15, or that equal triangles on the same base are of equal altitudes. On the contrary, our knowledge of the matters of fact (i.e., knowledge of the real world of things and events) can never attain absolute certainty. Probability, and not certainty, is all that we have in this area of ideas and beliefs.

5. Comments

(1) Scepticism has never found favour with the general body of thinkers, either academic or lay. It has never achieved a lasting grip on the human mind which has a natural and desperate longing for truth. "Doubt and even bewilderment beset the student in the pursuit of philosophy, but to raise the doubt, pursue the truth, and hope to attain it—this is the great adventure of the human spirit."[2]

(2) Critics of scepticism try to show that the four principal arguments of the sceptic are unconvincing. The historical argument, for example, does not prove that because satisfactory solutions of problems have not so far been achieved, that will never be possible. Nor is it the case, historically, that human knowledge has not at all improved. It is pointed out that gradually disputes are losing their intensity and moving towards a final settlement.

(3) The dialectical argument breaks down largely with the refutation of Zeno's arguments. Zeno's antinomies have been shown to rest upon a misconception about the nature of space and time. Hegel tried to show that

contradictions are only apparent and are reconciled under higher concepts and finally under the notion of the Absolute Spirit. At any rate, uncertainty as to those features of reality to which the antinomies refer does not entail that reality itself is unknowable. The physiological and psychological arguments have considerable weight, but there are answers to them also. The phenomenalist may deny any reality beyond sense-data (cf. subjectivism), but the scientist may argue that there can be no doubt at least about the quantitative features of things. Again, the 'real present' is not without relations to past and future, and there is ample evidence that memory is not always fallible.

(4) Scepticism is foreign to common sense, and repugnant to the practical man who is a confirmed believer in the possibility of doubtless propositions. Full-fledged scepticism is said to be self-refuting. If no judgment is certain, then the judgement that no judgment is certain cannot itself be true. Proof consists of advancing some premise which itself must be above doubt. But if no judgment is true, the arguments adduced for scepticism must themselves be false. Scepticism is therefore unproved, if not quite disproved.

6. Agnosticism and Phenomenalism:

Agnosticism is a position midway between sheer scepticism and the belief that *certain* knowledge is attainable. The word 'agnosticism' is from the Greek word 'agnostos' (unknowing) and is first used by T.H. Huxley. He used it in a religious sense to mean that God cannot be known, although His existence may not be denied. But currently, its meaning has extended beyond theology into metaphysics in general, and God has been replaced by Reality. Thus, agnosticism is that position according to which knowledge of the ultimate reality is not possible but only of its phenomenal menifestations.

We find marks of agnosticism in Locke who maintained that objects are known only through their qualities, their matter or substratum remaining unknown. All knowledge comes from experience in which our contact with things cannot pass beyond qualities. But Locke's agnosticism stops half-way, since he believes that primary qualities such as extension, size, etc. are objective, and we have demonstrative or inferential knowledge of God.

Kant furnishes the first elaborate and well-argued system of agnosticism. He contends that knowledge of things is possible only through the forms of sensibility and concepts of the understanding. But because these forms and concepts are *a priori* and subjective, the noumena

or things-in-themselves necessarily remain unknown. Understanding makes nature. The things-in-themselves must be there as the source of phenomena, but their true nature is never revealed. A similar position is upheld by Hamilton, Mansel, Comte and Herbert Spencer.

Phenomenalism is, roughly speaking, only another name for the same theory. It may be defined as that epistemological position according to which knowledge is possible only of phenomena or appearances—or, conversely, the world that we know is phenomenal. Thus, while agnosticism is the negative, phenomenalism is the positive side of the same position. Agnosticism denies the knowledge of the ultimate reality, while phenomenalism affirms the knowledge of its appearances.

7. Relativism

Agnosticism, generally, rests upon another epistemological position called relativism, according to which, the object cannot be known in itself but only as related to the subject and to other objects. Absolute knowledge of an object is impossible, because its nature is determined by a two-fold relation. First, it is related to other objects for its being and peculiar features. It causally depends upon them and can be perceived only through a distinction from some of them, and assimilation with some others.

For example, when we perceive a thing as blue, it is distinguished from those objects which are not blue, and assimilated with those which are of the same colour. Secondly, in order to be known it must be related to mind through the senses, and must be modified by subjective psycho-physical conditions. Berkeley showed how all qualities, both primary and secondary, are subjective in character, since their perception is impossible except through the senses. The sophists of ancient Greece regarded all knowledge as relative to the individual. But while their relativism is sensationalistic, the pragmatists advocate a new type which may be called utilitarian. The truth-value of judgments, they say, is relative to human interests. The agnosticism of Locke and Kant is a consequence of their relativistic view of knowledge. Hamilton, Mansel and Herbert Spencer extend their relativistic standpoint to the case of the Absolute or the ultimate reality, and offers certain arguments to show that any knowledge of the Absolute is impossible.

(1) Hamilton argues that thinking is necessarily conditioning, i.e., bringing the object under a relation to the subject. But the Absolute is unconditional. Hence knowing the Absolute as an Absolute, i.e., as a reality transcending all relations and conditions is 'conditioning the unconditioned', which is absurd.

(2) Henry Mansel contends that knowing involves distinction and assimilation, and therefore limitation. But the Absolute is a unique self-complete entity, above all conditions and limitations. Hence, it can neither be distinguished nor assimilated. No knowledge of it is, therefore, possible.

(3) Spencer tries to show that the relativity of knowledge follows from the nature of both the process and the product of thought. To know is to relate—to show likeness and difference. Hence our highest generalisations cannot be subsumed under still higher ones, and therefore they remain unexplained, being themselves the ground of all explanations. Perception extends only to phenomena—matter, motion, force and consciousness. But all these being relative, there must be an absolute reality as their ground. But, because absolute, it cannot itself be knwon. Spencer calls this Absolute 'the Unknowable'.

8. Criticism of Agnosticism and Relativism

(1) Idealists have attacked agnosticism in more than one way. Fichte did away with the thing-in-itself of Kant and said that the mind (the Ego) and its ideas alone are real. Hegel went to the length of identifying thought and being, and asserted upon that basis the possibility of knowing the real. In general, for the idealist, the Absolute is not a transcendent reality having no relations to the finite world and finite thought. On the contrary, it comprehends all finites as a unity-in-multiplicity or identity-in-difference. And, because it is itself thought or reason, it is quite comprehensible to the finite reason.

(2) Kantian agnosticism is said to rest upon the misconception that because the noumenon 'appears' only 'through' our *a priori* forms, it is itself unknowable. But there is no logical difficulty in thinking that there is a real correspondence between the forms of thought and the forms of being. Such a correspondence is amply evidenced by the way our judgments work in our experience and action.

(3) The arguments of Hamilton, Mansel, et al., involve an unproved presupposition. The Absolute is said to be unrelated to thought and then claimed to be unknowable. But the Absolute, as Caird argues, is a non-entity, a chimera, if taken apart from its relation to thought. That which is the final goal of thought "is not and cannot be an Absolute which is simply the negation of thought, but rather that which comprehends all finite things and thoughts, only because it is itself the unity of Thought and Being".[3] An acquaintance with the relative provides by contrast a comprehension of the absolute. An understanding of the absolute is possible by

distinguishing it from the finite and the relative and assimilating it with the human spirits which are but finite reproductions of the Absolute Spirit.

(4) In order to exist, objects may be related to one another, and, in order to be known, the objects must be related to the mind. But to reduce an object exclusively to its relations is illogical, since relations cannot exist without something to be related. Again, the knowledge-relation, as the realist points out, need not necessarily affect the nature of the object. There seems to be no logical contradiction in thinking that objects are faithfully represented in our ideas, or in at least the more important of them.

9. Knowledge is possible

From all that has been said, certain conclusions seem to follow. First, scepticism is at any rate untenable. It stands between the horns of a dilemma. Either it is proved or unproved; if proved, such a proof will involve a use of judgments which must be accepted as certain. Secondly, agnosticism and relativism rest upon a certain view of the nature of perception, which is not accepted generally. Even if this view were right, therefrom it would not necessarily follow that ideas of perception misrepresent the objective nature of things.

Empirical knowledge cannot be stamped as absolutely uncertain and useless on the ground that uniformity of nature and causality are unproved. It cannot indeed attain to absolute cetainty unless (i) uniformity and causality are true, and (ii) the particular causal relations among facts concerned are actually discovered and known. There does not seem to be much difficulty with regard to the first condition. Uniformity and causality seem intuitively certain; and moreover, the weight of empirical evidence in their fovour is so great that we can have only a sort of purely theoretic doubt concerning them. Difficulty, however, remains as to the second condition, since the methods of induction have their peculiar limitations. Further, in view of the complex mechanism of our apprehension of secondary qualities, our knowledge of them remains doubtful.

Thus, we have two types of knowledge. First, some propositions, e.g., the propositions of *a priori* formal sciences like mathematics and those about the mathematical and logical features of empirical objects, are fully certain. They are non-empirical or unrelated to the problems of uniformity and causality. Secondly, propositions about the non-mathematical sensuous features of empirical objects have both a priori and a posteriori elements, and are only probable. Logical and psychological consideratons, coupled with the historical and the pragmatic, make them highly probable,

almost certain, but not fully certain.

This situation may not be entirely satisfactory from the theoretical standpoint; but from the practical point of view it may be just good enough. Life can well work with probability, and as Bertrand Russell has put it: "To teach how to live without certainty, and yet without being paralysed by hesitation, is perhaps the chief thing that philosophy, in our age, can still do for those who study it."[4]

10. Subjective Idealism, Subjectivism or Mentalism

Subjective idealism or subjectivism is that philosophical position according to which knowledge is always knowledge of ideas, and because ideas cannot exist apart from a mind there is no extramental objective reality existing independently of mind.

The subjectivity of certain qualities of things was long known to philosophers. But subjectivism, in modern times, began to take shape with John Locke. He distinguished between primary and secondary qualities and said that the secondary qualities are only our own ideas (resulting from the action of objects upon our senses in virtue of their molecular properties). But he believed in non-mental substances as the source of sensory stimuli. Berkeley tried to show that primary qualities are as subjective as the secondary ones. He denied the existence of material substance, and said that minds and their ideas alone are real. 'Esse is percipi'. Anything must be perceived in order to exist; no matter, but only qualities are perceived; and, therefore, there is nothing besides minds and their ideas. Our belief in material substances is, according to him, only a result of illegitimate abstraction.

11. Berkeley's arguments

Berkeley offers certain arguments which may be classified (following Russell) as 'empirical' and 'logical'. The former show, from an analysis of experience, that qualities of things depend upon our senses and are therefore no better than our ideas. Folllowing Locke, Berkeley first shows that the secondary qualities such as colour, sound, heat, taste, smell, etc., are subjective. For example, colours cannot be seen except through eyes. To a jaundiced person everything appears to be more or less yellow; the same water appears cold or lukewarm with the variation of conditions. He then proceeds to show that the lot of the primary qualities is no better.

Firstly, primary qualities, such as extension, weight, motion, number, etc., vary with the varying conditions of perception like the secondary ones. The same thing looks larger when we are near it than when we are

far off. The same motion appears fast to one person and slow to another. The same thing is one, three or thirty-six according as it is measured by a yard, a foot or an inch. Secondly, the primary and the secondary qualities cannot be perceived apart from each other. Just as colour cannot be perceived apart from extension, so extension cannot be perceived apart from colour (by sight) or heat and cold (by touch). The same grounds which make the secondary qualities subjective apply equally to primary qualities which are, therefore, no less subjective.

The logical arguments show that qualities are always 'perceived' and are therefore *ideas*. How can ideas exist outside a thinking mind? Perceptions or ideas must be of some mind or other. To conceive them apart from a mind is a contradiction in terms. The being of a thing is its being perceived. Even when we think of anything not present at the moment, we think in terms of sensible qualities, i.e., as something extended, coloured, and so on. We may think of it as not perceived, yet we 'think' of it; it is a 'thought' object.

Berkeley attacks the notion of 'abstract idea' and contends that all ideas are, in fact, concrete and particular. We have, for example, no idea of any abstract triangle, a triangle in general, but only of particular triangles having sides of definite lengths. To conceive matter or external object as something unrelated to mind is only to indulge in abstraction which yeilds ideas which are really empty and unfounded.

12. Solipsism

Solipsism is the view according to which the individual self, i.e., the individual mind or spirit, and its ideas alone exist. The word 'solipsism' derives form the Latin words 'solus', which means 'alone', and 'ipse' which means 'self.' Thus 'solipsism' literally means 'myself alone'. This view is the most extreme form of subjectivism or subjective idealism. To a solipsist all objects of knowledge are only his own ideas or perceptions, so that they cease to exist when he is unconscious. He thus denies the independent reality not only of external matrerial objects but also of other minds or spirits. In an even more extreme form, in which the solipsist denies or doubts the existence of his mind as a *substance*, all that exists is only his own mental states, ideas or impressions.

Solipsism has not been upheld by any school of philosophers, nor is known to have been advocated by any outstanding individual philosopher. Berkeley, for instance, is a subjectivist, but took care to avoid solipsism. He held that when we stop perceiving an external object, such as a tree, for example, it still continues to exist as an idea in the mind of God. And

besides God, he also believed in the existence of other minds or finite spirits. He argued that although we do not and cannot have an *idea* (which to him meant 'sense-image') of God or finite spirits, we have a *notion* of them. Again, although Hume's view that impressions and ideas are the only objects of knowledge undoubtedly smacks of solipsism, there is still a fundamental difference between solipsism and his sceptical position. He did not deny the existence of an external world as the source of our sensations or impressions but only doubted our knowledge of it, i.e., the justification for our belief in its existence.

13. Criticism of subjcetivism

(1) Subjectivism has been bitterly criticised by different philosophers and philosophical schools. Russell points out[5] that both types of Berkeley's arguments are fallacious. For example, Berkeley's argument that because the same water, under different conditions, appears cold, lukewarm or hot, heat and cold are subjective, is mistaken.* What this experiment proves is not 'hot and cold' but 'hotter and colder'. There is nothing in it to prove that these qualities are subjective. Again, the size of a thing, for example, appears differently at different times to a camera as to our eyes. But the representations of a camera are not taken to prove the subjectivity of size or space.

(2) In fact, what the perceptual data prove is that our perception of such qualities depends upon certain conditions, not that the qualities themselves are perceptions. The qualities may be conditional, but not necessarily mental. Modern science has shown that there are physical forms corresponding to these qualities, such that to variations in the latter there correspond variations in the former. To different colours, for example, there correspond lightwaves of different wave-lenghts.

(3) Subjectivism and solipsism are obviously repugnant to our common sense.† It is apparently queer, for example, to say that my ideas of sugar are themselves sweet, white or hard. If my ideas and impressions are the only realities, it is not understood why one cannot have them just as one pleases. This forces us very logically into a recognition of objects outside and independent of mind. Berkeley replies to this objection by saying that our ideas are not created by us but communicated by God. But

* He argues that tastes and smells are subjective because they are either pleasant or painful. But here he is taking advantage of the ambiguity of the terms 'pleasure' and 'pain'. They mean either the pleasant or painful 'quality' of a sensation or the 'sensation' which has this quality. In the first sense pleasure and pain are objective: in the second, subjective.

† Dr. Samuel Johnson, in Berkeley's own day, struck his foot against a stone, till he rebounded, and said 'I refute it thus!' (Boswell's *Life of Johnson*, Vol.I. p.313)

it is obviously more reasonable to explain the ideas as grounded in an extramental world than as divine communications.

(4) The logical argument of Berkeley, as Russell and other realists point out, rests upon a fallacious analysis of the perceptual situation. In order to be known, objects must of course be perceived. But that does not imply that objects cannot exist without being perceived. To exist and to be perceived are two fundamentally different aspects of things. The former is a condition of the latter, but not conversely.

(5) The modern realists such as Perry, Montague, G.E. Moore and others have advanced many arguments to bring out the inherent logical weakness of subjectivism. They ascribe subjectivism to a wrong psychological and logical analysis of the cognitive situation. The knowledge-relation is external, in which the object is as independent as the subject. The very notion of knowing logically implies the duality of the subject which knows and the object which is known. An object cannot be perceived unless it first exists.

(6) In fact, the hypothesis of an extramental world which may or may not be perceived, is quite logically permitted. It is 'known' only when some mind stands in some relation to it. Knowing is one of the many relations in which objects stand to each other and is irrelevant to their 'being'.

14. Realism : Popular and Scientific

According to realism, objects of knowledge exist independently of mind and it is possible to have a real knowledge of them.* It is the direct antithesis of subjectivism and has a two-fold thesis. (i) First, we do not know ideas but objects, either directly or through ideas; and, therefore, (ii) objects exist independently of mind. While, for subjective idealism, objects of perception are ideal, for realism, they are real.

Ordinary people of unsophisticated common sense are confirmed realists. But their realism is uncritical, not a reasoned-out doctrine. This entails the need of a logical checkup. We may thus speak of two types of realism: popular and scientific. Popular realism is naive and accepts things as they apear to be. It is therefore also called 'naive realism'. It looks upon our senses as so many windows through which mind attains a direct communion with objects and perceives them just as they are. It does not distinguish between qualities but regards them as objectively present in things. Mind is as it were a tablet on which a copy or picture of the world

* The word 'realism' has different senses and, in fact, realism appears in various forms and degrees. It is difficult to keep the ontological and epistemological senses apart.

is impressed through perception, or a mirror in which objects are reflected in their original form.

Obviously, popular realism lacks a foundation in adequate knowledge of physiology and psychology. Scientific or critical realism tries to overcome this deficiency and to give a critical answer to the question as to the real nature of what we know. It is at least as old as the Greek atomists, and finds its modern advocacy in such philosophers as Descartes, Hobbes and Locke.

Through psychological analysis Locke arrives at two conclusions. First, knowledge is knowledge of ideas, and ideas are the ideas of qualities, not of things as such.[6] Secondly, some qualities are objectively there in things just as they are perceived, while others are subjective. The former are *primary* qualities, e.g., extension, figure, size, solidity, motion, etc; while the latter are *secondary*, e.g., taste, smell, etc. The secondary qualities are not in things as such, but are mere sensations, i.e., results of interaction between our senses and the objects. Objects produce them in virtue of the primary qualities of their insensible particles.

Knowledge is thus not a direct contact with things, but an indirect contact through ideas. Ideas are representative and knowledge is representaion—the representation of qualities only, their underlying substratum remaining unknown. Locke's epistemological theory, therefore, is also known as *representationism* and his realism, *representative* realism.

15. Neo-realism and its arguments

Neo-realism (or New Realism) appears lately as a strong reaction against idealism, particularly against its subjectivistic form. It is virtually a return to popular realism. According to the neo-realists, knowledge relation is external, involving no such meditation as that of ideas as the subjectivist holds. It is a simple two-term relation (subject-object) in which the object is directly revealed to the subject. There is a real extramental world, and in experience this world is directly present to us. 'When we are aware of an object, say a tree, it is the tree itself which we are aware of, not our visual, auditory, or touch sensation.' Not only primary, but the secondary qualities also are real. Nay, even illusions (and logical principles) are in some sense real.

Neo-realism is pioneered by the English philosopher, G.E. Moore, and develops into a powerful school with such members as Holt, Marvin and Perry in America. Their arguments in their joint work, *The New Realism* (N.Y.,1912), constitute mainly a polemic against idealism, the most important of which are as follows :

(a) The Berkeleyan dictum, 'esse est percipi', entails an infinite regress and is therefore unsatisfactory. According to it, to be real is to be in some perception. This perception, to be real, must be in some other perception which, again, must be in some other perception and so on ad infinitum.*

(b) Subjectivism passes from a true premise to a false conclusion—'the fallacy of arguing from the egocentric predicament.' The premise is : Nothing can be *known* to exist unless it is an object of knowledge (the predicament). What follows from this is that all known things are known. But the idealist wrongly concludes that 'nothing can *exist* unless it is an object of perception'. Existence and perception are distinct concepts like 'green' and 'sweet' and cannot be necessarily related, i.e., made logically inseparable.

(c) Objects cannot be said to exist 'in' the mind. Objects of perception are obviously different from objects of memory or imagination. The imagined water or remembered feast does not satisfy our thirst or hunger. The 'apprehension' of an object may be in the mind; but if the object also is in our mind then the relation between my mind and an object will be the same as the relation between two apprehensions, which is absurd.

(d) Subjective idealism seems to rest upon an ambiguity about the word 'idea'. Its general position may be stated in the form of a syllogism, such as : (1) Ideas are incapable of existing apart from a mind; (2) Things, in so far as they are known, are certainly ideas; and (3) Therefore, things are incapable of existing apart from a mind.

Here, 'idea' in the major premise denotes the 'act of perceiving'; in the minor, 'the thing or content that is perceived'. But, evidently, the object of an act of thought cannot be the same as the act itself.

(e) Knowing an idea simply means knowing of knowing, which is absurd. Knowing necessarily implies some thing other than knowledge, i.e. ideas. Moore points out that knowledge involves two distinct elements: consciousness and the object of consciousness. In respect of consciousness, all perceptions are alike.But perceptions are different, and this diffrence can be

* Moore points out that, on such a hypothesis, the self itself and its knowledge also exist only so long as they are known. But if they are allowed to exist independently of knowledge, the same must extend to objects as well.

explained only by a reference to objects and their real differences. The idealist cannot say that we cannot get out of the circle of ideas and sensations. "Merely to have a sensation is already to be outside of that circle."

(f) The idealist commits, among others, the fallacies of 'exclusive particularity' and 'definiton by initial predication'. The former consists in the view that because objects are known to have one relation, i.e., their relation to mind, they cannot have any other relation and are, therefore, the exclusive possession of the mind. But, in fact, the same object may have more than one relation. It may be related to consciousness and yet exist independently in the external world. The second fallacy occurs when the idealist tries to show (i) that everything known is an object of consciousness, and (ii) therefore, every other thing, the entire universe, must be an object of some consciousness.

16. New Critical Realism*

Modern critical realism stands half-way between idealism and neo-realism. Against the idealists, it argues that our datum of knowledge cannot be our own ideas. For example, we perceive now 'a round wheel about three feet in diameter moving away from us and now between this house and the next'. Obviously, my idea itself is neither round, nor between two houses. Moreover, when a sound is heard or a colour seen by two persons, their mental states are two and different, although the object is the same.

Against the realist it contends that perception is not so simple a process as it seems. Objects are not perceived in a direct and unqualified manner. (1) An object cannot be in two or more consciousnesses at once. Therefore, when the same object is perceived by more than one person, the immediate content or datum of consciousness is different from the outer object. (2) Again, science also teaches this distinction between datum and object. The sun which we see just now, is the sun of nearly eight minutes ago. We may continue to perceive a star which actually went out thousands of years back. Our immediate datum is thus not the object but some message which it sends out.

Knowledge, therefore, is not a two-term relation but involves three

* Critical realism has been so called in order to distinguish it from the older critical or scientific realism. Modern critical realism appears best in the joint work of Durant Drake, A.O. Lovejoy, J.B. Pratt, and others, viz., *The Essays in Critical Realism* (Macmillan, 1920).

terms: the subject or the conscious organism, the object, and the datum. The object is beyond and independent of the mind, having only primary qualities, and is not immediately apprehended. But what is this datum? It is an essence or 'character-complex' resulting from an interaction between the subject and the object. It does not exist, but *subsists* as a logical entity, being therefore immutable. In true knowledge, such character-complexes are identical with the real characteristics of things; in error, they are different.

Note : Epistemological Monism and Dualism

The word, 'monism', comes from the Greek 'monos' which means one or single; 'dualism' from the Latin 'duo' which means two. Ontologically, monism and dualism are, respectively, those theories according to which reality is ultimately one or two, in number or in kind. In epistemology, monism implies the identity or oneness of the datum and the object of knowledge: dualism, their difference. Subjectivism in different forms and realism in its popular and modern forms (including neo-realism) are monistic. On the contrary, traditional scientific realism and the later-day critical realism are dualistic.

17. Conclusion

Our conclusion is immensely simplified by the fact that the different theories of idealism and realism bring out their relative strength and weakness through their mutual criticism and cross-examination already outlined above. It appears that subjectivism and modern monistic realism are both unsatisfactory. First, as to subjectvism, while its own thesis is not proved, the counter-thesis of the existence of extramental independent objects is not disproved. Rather, the thesis seems absurd, while the counter-thesis appears to be self-evident. Knowing necessarily implies an object apart from the act of knowing. And the placing of this object as an ideal content in an absolute *divine* mind pre-requires at least a proof for the existence of such a mind. Berkeley's own passage from ideas to God is not convincing.

Secondly, modern realism seems to be an over-reaction to subjectivism. Analysis of perception on a scientific basis leads us away from it. Neo-realism cannot satisfactorily account for error. If the object is directly apprehended, it is difficulf to understand how an apprehension is possible to which the object does not correspond. But the position of critical realism is also fraught with difficulties. If the real objects are not directly known, we cannot compare our data with them and see whether

the characteristics in the data are really there in objects. The existence of objects also remains a guess; as the realist himself admits that the objects apart from data are a matter of 'faith'.

Such a position is unsatisfactory. Besides leaving the problems of knowledge unsolved, it tends to lead us back to a position analogous to subjectivism or Kantian phenomenalism.* We believe generally that (i) there is a real world of objects, and (ii) its existence and at least some aspects of it are directly known. The primary qualities cannot be said to be merely a matter of sensation. As for the secondary qualities, we seem to be, by the nature of the case, in an inescapable predicament. Their dependence upon senses need not necessarily imply their subjectivity; yet their objectivity also remains unproved. The positon to which we are thus led is more or less different from each of those condsidered above, and may be called a sort of modified realism. It combines the general position of science and that of common sense duly reviewed and rectified.

* The object of perception, i.e., the outer existent thing, "seems to have receded again to a kind of mysterious Kantian *Ding an sich*, eluding every attempt to grasp it. If the logical position of the Critical Realist is better than that of the New Realist, he gains his advantage at great sacrifice, finding himself well on the way back to the camp of the Idealist." (Patrick, *Introduction*, p.360)

PART IV

COSMOLOGY

CHAPTER IX

THE UNIVERSE : SPACE AND TIME

1. The popular conception of the Universe

In the naive popular conception, the world is a vast spatial structure having the sun and the moon along with numberless stars revolving around the earth as its centre. It is extended and is in time; infinite but not eternal, being created by God long ago. The earth is flat, having the sky above as a semi-spherical structure in which somehow the heavenly bodies are studded. Sometimes, the heavenly bodies are misconceived as gods; and some of them, more commonly the sun, have been worshipped. But, more generally, the heavenly bodies are believed to be material, though of a different nature from the earth.

Life and mind are recognised as real along with matter, and their distinctions are sharply drawn. Following a religious dogma, it is believed that the world will perish some day in a future not too far off. The solar system is without a parallel, and there is no other earth like our own, inhabited by living beings, particularly human beings.

2. The scientific view of the Universe

Science departs from the popular notion both microscopically and macroscopically.[1] On the one hand, its general tendency is to reduce all objects to simple material particles, the distinctions between matter, life and mind being called merely apparent. On the other, the world is considered to be finite and yet immensely larger than the 'infinite' world of the layman's imagination. Light, travelling from the earth at 186,000 miles per second, requires millions of years to reach the farthest off stars visible through a powerful telescope, and at least 20 billion years to go round the world.

Science has not answered the question as to whether the universe is created or eternal; or, if created, when and how (cf. the 'Big Bang' theory). But the solar system is believed to have an age of about 5000 million years. The creation of the planets out of the sun is generally ascribed to an

accident in which a star eventually came very near to the sun and, by gravitational attraction, made part of the sun shoot out into the outer space. This pulled-off solar stuff, originally gaseous, broke up into parts and gradually cooled and condensed to form the planets. The earth is material, and it is only by gradual transformation that life and mind evolved at the far later dates of the earth's history. As to whether there are other solar systems and other planets so inhabited by living beings, nay by human species capable of artistic and philosophical pursuits, scientists are uncertain. The universe has indeed enough space to accommodate many other solar systems. Yet, the unimaginable distances between stars and the figid reign of the laws of motion do not leave much scope for many such accidents as the one that begot our solar system. That the planet Mars contains life is still only a guess.

3. Popular conceptions of Space and Time

The universe or the cosmos appears to have certain very distinct features, of which space and time seem to be the most general and fundamental. Things or events are perceived as having certain qualities and relations which we call spatial or temporal. Things have extensity and shape, are either larger or smaller, here or there, near or far, above or below, inside or outside. Such are the spatial qualities and relations. Again, things or events have a duration and occur either now or then, either before or after. Such qualities and relations are called temporal.

Thus our notions of space and time correspond to these two types of qualities and relations. We do not indentify space and time with them, but regard them as the ground of the latter. Things and events have these qualities and relations 'in' space and time. Space is an empty receptacle in which things exist and move, in which they extend and have a shape, and are mutually related in various ways. Time is as it were a stream in which things or events occur and either succeed or precede. While space broadly means the co-presence of things, time means their succession. We have an idea of extension when, for instance, the two steel points of a compass are placed upon our hand *pari pasu*. But if one point is placed first and then the other, we have a perception not only of extension, but also of a 'before and after'. This before and after makes succession to which we give the name 'time'.

Space is extended in six directions—right and left, up and down, and backward and forward. Each of these pairs makes one dimension of space which has, accordingly, three dimensions. A line represents a single dimension—length; a plane represents two—length and breadth; and a solid

represents all the three—length, breadth and thickness. But time has only one dimension, before and after, between which there is a middle-ground. Accordingly, there are three distinguishable parts in the flow of time, viz., past, present and future. The present alone is in our immediate experience; the past is gone and constructed in memory, while the future is ahead in our anticipation. Time seems to flow from the future, into the past, through the present. The present, as W. James contedns, is not a knife-edge or instant, but has some real duration. Both space and time are, however, infinite. Space extends in all directions indefinitely and time has neither beginning nor end.

These common notions of space and time suggest the questions about them in which we are philosophically interested. First, what exactly is to be understood by the ideas of space and time? What is meant by their infinity? Secondly, are they subjective or objective? Are they real qualities of things or mere mental constructions?

4. Perceptual, and Conceptual or Mathematical Space

Space and time are objects of both perception and conception—both experience and thought. Hence a distinction can be drawn between perceptual and conceptual space, as well as between perceptual and conceptual time.

Perceptual space is obviously the space of our experience. We perceive things as standing to one another in certain relations of position, distance and direction. Things co-exist or occupy different positions, are either above or below, far or near, either to the right or to the left, and so on. Again, each object is perceived as having certain 'extension' or voluminousness, and a certain size and shape (which are themselves the 'aggregates' of those relations between parts of the thing). Perceptual space is simply this extendedness or apparent relations of position, size and shape among different objects. Conceptually, space is an infinite and perfect void or vacuum, an unlimited receptacle in which things exist or move. While perceptual space is merely a product of the mental colligation of perceived relations, conceptual space is kind of an ideal plan or structure of all possible relations. While we have the former in perception, we have the latter in thought or imagination by mentally eliminating all things from the apparent void.

The things in a room and its six sides, for example, have certain observable relations which constitute the space of perception. But if we take away 'everything' from the room and allow its sides to expand indefinitely in all directions, we have in our imagination a bare extensity

of infinite magnitude. This is conceptual space, which is absolutely empty, homogeneous, continuous and isotropic. Mathematicians deal with this space. The points, lines, surfaces and figures of geometry are never objects of experience, but of pure conception.

5. Perceptual and Conceptual Time

Like space, time is also perceptually an aggregate of perceived relations: relations of simultaneity, precedence, succession, duration, and so on. We perceive things as changing, as arising and perishing, as occurring together, before or after, and as moving from place to place. These data of perception constitute perceptual time. But conceptual time is not the perceived relations of succession, but the bare 'stream' in which such relations occur. If all things, events and changes are mentally taken away from our conception of before and after, what remains is a bare flow, a bare succession of instants. This residue is conceptual time. It is pure duration or generalised succession, ceaseless and unlimited. Our seconds, minutes, hours and such other units of duration are its arbitrary and incomplete fragments.

In perception we have the present alone, and the present seems to have a duration ('specious present'). But in conceptual time, the past, present and the future are clearly demarcated, and of these the present exists only in our imagination. It flows out from the future immediately to be lost into the past, like the duration of a spark or a lightning, as it were.*

6. The infinity of space and time

The problem of the infinity of space and time has two aspects, and we have, accordingly, two types of questions:

(a) Are they infinite in their extensity or duration?

(b) Are they infinitely divisible?

(a) Are they infinite in their extensity or duration?

Space is commonly conceived as infinitely extended, and time as without a beginning or an end. But this ordinary view is not always acceptable to the specialists. Plato and Aristotle believed in eternity in which Plato housed his Ideas and Aristotle his eternal motion. Descartes, Spinoza and others regarded space as infinite. Kant regarded space and time as *a priori* forms of sensibility and tried to show that our ordinary notions of finitude or infinity of space and time do not apply to the real

* This is at best a bad analogy. In fact, conceptual present can hardly be explained but only felt. We may call it a logical entity without regarding it as unreal. We talk of 'spaces' and 'times' as well as of space and time. Obviously, the former are perceptual, and the latter conceptual.

world the world of noumena. That is, we cannot say whether the real world is finite or infinite, eternal or temporally limited.

Modern science, headed by such great mathematicians as Einstein, does not believe in infinite space. It is argued that bodies cannot be infinite in number. If they were, they would radiate an infinite quantity of light and heat which would reduce the earth to a state of incandescence. Space is unbounded but finite. If a ray of light is sent out from any point in it, it will come back after a round-the-world trip and continue to revolve without a stop. Space is thus comparable to the surface of a sphere.

7. Comments

(1) The notion of finite space and time is logically difficult to accept. By space we understand the extensity of the world, empty or full. Being finite means having a boundary or limit. Questions naturally arise as to what lies beyond this limit. A limit logically forces us into something beyond it ad infinitum.* Thus no idea of limitation appears to be consistent with the essential nature of space and time.

(2) Yet, the notion of infinity too has its own difficulties. There must be in existence only as much space as there actually is, not more. But this means that there must be a definite and limited quantity of space. To be infinite, therefore, space must increase at an infinitely increasing rate. But this is all something utterly incomprehensible. Time is also wedded to similar difficulties, which further involves the problems of change and causality. If the world is in successive moments of time, there must have been an absolutely first moment. But can we really think of such a moment without being arbitrary? It is not at all easy to answer this question.

(b) Are they infinitely divisible?

There are similar difficulties and divergences of opinion with regard to the second question. By the infinite divisibility of space and time is meant that any point of space or moment of time, however small, can be further divided. Aristotle maintained that space and time are infinitely divisible, though not actually so divided. Descartes held that there are no atoms, i.e., no ultimate parts of space which cannot be further divided.

The difficulties about the infinite divisibility of space and time were first clearly indicated by the Greek philosopher, Zeno. If space is composed of indivisible units, he said, such units will each have a

* Zeno's argument : Everything that exists is in space. Space exists, and therefore must be in space. That space in turn must be in another space, and so on ad infinitum. Space is therefore unlimited.

magnitude. It is self-contradictory that something having a magnitude is not divisible; and similarly with time. On the contrary, their infinite divisibility makes motion and change impossible. Motion, for instance, means the transition from one point to another. But because space is infinitely divisible, there is an infinite number of points between any two points. Hence a body cannot even start moving.

We cannot possibly get out of these difficulties by regarding perceptual space as finite and conceptual space as infinite. There are no *two* spaces. Perceptual 'spaces' are but the limited fragments of one whole conceptual space. Therefore, if motion is logically impossible in conceptual space, it cannot be possible in the other as well. The spreadoutness of the world, finite or infinite, alone guarantees to reason the possibility of motion; but the infinite divisibility of this spreadoutness cuts out this possibility. We must have ultimately indivisible units of space in order to understand motion (and also the very spreadoutness of space). And the whole difficulty seems to disappear if we allow the notion of magnitude to be ultimately consistent with indivisibility. We may continue to break up a brick into smaller and smaller parts; but we shall arrive finally at the 'minutest' units which have magnitude without being further divisible. The mathematician divides a unit of one into halves, quarters, eighths and so on indefinitely. But the unit he divides is not a concrete absolute unit. A brick is *one* only relatively and hence further divisible. But the absolute unit cannot be conceived to be further divided, since it is then not a unit. If we take points to be such absolute units, and if a line is composed of such units, then it becomes quite understandable how anything moves along it.

8. The reality of space and time

To our common sense space and time are obviously real. They are distinguished from things which are supposed to consist 'in' them. The early Greek atomists regarded empty space as equally real with atoms. To Plato, space and time are only half-real. Aristotle regarded space as neither a void nor a physical substance, but as the limit of things—the limit of the surrounding body towards what is surrounded; and time as the succession of thoughts. In fact, there have been three types of answers to the question as to the reality of space and time; and these may be briefly considered as follows.

1. The realistic answers : These are the more common answers and agree more or less fully with the common-sense view. The objectivity of space and time is recognised, although their nature is not always conceived

in the same manner. Traditional science, including Galileo and Newton, believes in absolute space and time as the objective framework of the universe. Spinoza conceived space as an attribute of substance, while Descartes identified it with the very essence of matter. Space, according to Descartes, is but the extendedness of matter, so that there is no empty space apart from matter.✞

Thinkers of the common sense school, such as Reid, Martineau and McCost, maintain that space and time are independent realities directly perceived along with things. The spatio-temporal features of things are revealed to us by sensation just like such other properties as colour, taste and weight. Modern realists uphold the same view. Samuel Alexander goes as far as to regard space and time as the very stuff of the world. The intuitionist Henry Bergson views time as the inner nerve-centre of reality. Of course, by time he means pure duration which is a ceaseless and homogenous flow, not the perceived time having such distinct parts as past, present and future.

2. The idealistic answers : According to certain forms of idealism, space and time are not realities in which things exist, or real qualities of things, but purely *a priori* forms of perception. We find a vigorous and typical advocacy of this view in the phenomenalistic idealism of Kant. According to Kant, space and time are the necessary forms of sensibility by which the multitudinous sense-data are ordered. We do not derive them from experience, because experience itself presupposes them. We cannot think objects except as in some time and as entities out there in some space. If there were no minds to perceive, space and time would not be there.

Plato conceived space as half-real, apprehended not by sense but by a sort of spurious reason. Leibniz regarded space as a result of confused perception, as only a phenomenal appearance of things. There is, according to him, nothing like empty space or empty time. Subjectivists like Berkeley and Hume also maintain a similar view.

3. The conceptualistic answers : Empiricists like John Locke and others take space and time to be objective in one way and subjective in another. Particular finite spaces and times are real qualities of things. The primary qualities which Locke considers to be real, as opposed to the secondary ones, are but the different forms of spatiality. But space and time as pure or absolute entities are only concepts or mental constructions, formed by abstraction from discrete perceptions of things having spatio-temporal qualities. We have space by mentally eliminating 'things' from

✞ 'Space and the corporeal substance are not different in reality. The same extension which constitutes space, constitutes reality' (Descartes).

the totality of our experience of 'things having extension and distance', and time or bare duration, by excluding the 'ideas' from our flow of consciousness.

Other empiricists, such as Mill, Bain and the like, maintain a similar view. We have the awareness of space from tactuo-muscular sensations and of time from our inner flow of states succeeding one another.

9. Comments

Of the three views outlined above, the first one seems to be the most agreeable, none being fully satisfactory.

(1) The *a priori* or subjectivist view is apparently explicative of certain facts of spatio-temporal perception. Sizes and shapes of things, distances between points and durations between hours sometimes vary according as our perspectives and subjective conditions vary. Our spatio-temporal experiences seem to depend upon the scale of our bodies. "A fly must have a very different sense of the size of objects from ours. Doubtless if we were small enough to live on a molecule in the air about us, a single second (in which it has many millions of near-collisions and changes of path) would seem like an eternity."[2]

(2) But variations due to subjcetive conditons do not themselves prove the subjectivity of anything perceived. There stands a clear distinction between variations in perception and variations in the perceived. The latter may cause the former, but the former do not necessarily imply the latter. We have scientific means (apparatus of measurement) of distinguishing the objcetive from the subjective. Kant himself admits that objects of experience have real spatio-temporal qualities. What he denies is that these objects as such are 'real'. And that is the root of all troubles. But the generally accepted rule is that the necessity of thought is also the necessity of being or reality. If space and time are indeed forms without which we cannot think objects, they must be conceived as constituting true features of the real.

(3) The third or the conceptualist view is no explanation at all. To say that the notions of space and time are derived from our perceptions of extension and succession is putting the cart before the horse. Because these very perceptions would be impossible if space and time were not already there or if we had not ideas of them in our mind.

(4) The realistic view seems to be the most satisfactory one. It is apparent to common observation that we perceive space and time just as we perceive things. They seem to be real also on some logical grounds. We must accept them as real unless we grant (a) that the world is an absolute

unit and is of the nature of a mathematical point, and (b) that in it there is no motion or change. But the first suppositon renders the very world unreal, which we cannot accept without denying our own existence; and the second contradicts certain evident facts of our experience. Denial of motion would mean that my pen is producing all these letters without changing position, and denial of change would imply that Socrates, for instance, is still alive.

Nay, space and time are, in a sense, absolutely real. Things or events are 'in' them, not identical with them. Matter, motion or change, or whatever there is, presupposes space and time in order that they might be extended or might occur. Descartes' denial of empty space upon an identity of matter and extension and the empiricists' derivation of both from sense-data, therefore, appear to be unconvincing.

10. Space-Time and Relativity

Recent developments in sciecne, particularly in physics and mathematics, present a revolutionary conception of space and time, in which almost all fundamentals of the older notion have been overturned. The new conception advances two theses. First, space and time are more intimately related than they appear to be. In fact, they are two aspects of the same reality, namely, motion; so that we should speak of 'space-time' rather than of space and time. The single dimension of time becomes coupled with the three dimensions of space, whereby space and time themselves become hyphenated. Samuel Alexander makes such a conception of 'space-time' the very basis of his great realistic system. Space and time, as he says, "are inter-dependent, so that there neither is space without time nor time without space," and "space is in its very nature temporal and time spatial."[3] Space gives time its continuity and time gives space its fullness or discreteness of elements. "Without space there would be no connection in time. Without time there would be no points to connect." "Space and time", as Viscount puts it, "are really abstractions from a reality which includes both in mutual implication."

Secondly, space and time have no absolute immutable nature, but vary with the variation of perspectives. The same interval between two strokes of a bell, for instance, will be perceived as of different durations by two persons of whom one is in the earth and the other in the sun. But even then space and time are not mental constructions, but objective realities—rather, they together constitute the ultimate stuff of the world.

All this seems to take us far away from tradition and common sense; and make us shudder;[4] but the remedy suggested is for us to unthink much

of what we have thought so far. That space and time should be hyphenated is quite understandable. Even in ordinary experience, a full apprehension of anything involves its temporal as well as spatial aspects. Yet some other questions are only too persistent:

(1) How can bare space and time, being empty, themselves constitute the matrix of the world which is 'full'?

(2) How can space and time and, therefore, motion and change be anything at all, if they are out and out relative? It seems evident that something can be relative only with reference to some absolute reality. The phenomena of space, time and motion may 'appear' as relative to our perception. But there is probably no logical difficulty in conceiving them as having an absolute background. Their absolute counterparts rather seem to be a logical necessity.*

* Could anything wholly relative be really real? If, for example, two persons look at a building from two cosiderably different distances, they will perceive two different sizes of it simultaneously. The common-sense view is that the building has only *one* determinate size, and that it is absurd to suppose that it can have two different sizes at the same time. Hence if the perceived (relative) sizes were the only ones it is allowed to have, then it would have no size at all. And similarly with the temporal position of the building. One could, of course, suggest that the above difficulty does not remain in a universe with a *single* observer, and argue that the building has only *one* size at a time, but its size varies in accordance with changes in the position of the observer. One wonders how far this would count as an argument in favour of relativity without reducing the world to something like a dreamland.

CHAPTER X

MATTER AND LIFE

1. The nature of matter

The vast spatio-temporal framework of the world, to our common observation, appears to contain different kinds of things which (apart from God) are broadly divided into the animate and the inanimate. The animate beings are again of different types. But things generally are believed to be made, partly or wholly, of a common and basic stuff which appears in different forms in their different kinds. This common staff is known as matter. It is conceived as that element in things which is pervasive and perduring, retaining its being amidst all changes, growth and decay. When a block of wood is burnt into ashes, its matter only changes its form. without losing its being. The sensible qualities of things are considered different from this underlying stuff. Qualities consist in or belong to matter, and may wax, wane or disappear without affecting the stuff itself.

2. Traditional views of matter

In the sphere of science and philosophy matter has been conceived in a great many ways. The early Greek philosophers differed widely in their opinions about the ultimate nature and kind of matter. Thales, known as the father of Western Philosophy, cosidered water to be the only ultimate kind of matter. Anaximander considered it neutral; Anaximenes, air. Empedocles believed in four ultimate kinds: earth, air, water and fire. For both Plato and Aristotle matter was by itself a not-being, in the sense that it constituted concrete real objects only in conjuction with 'Ideas' or 'Forms' (Vide—Discussion on Idealism). Among the early Greeks, the atomists alone seem to speak with considerable sense about the ultimate nature of matter. They maintained that matter is the homogeneous stuff of all that exists, consisting of ultimate indivisible units or 'atoms' which differ only in size and shape.

Among the moderns also, there is a great diversity of opinions. A good many have denied the very ultimate reality of matter. Berkeley, for

instance, argued that nothing can exist except as an idea in some mind, and because there is no idea corresponding to matter, it does not exist. All things are, therefore, no other than ideas of sensible properties. Leibniz considered it to be made of indivisible centres of energy, which he called 'monads'; but he deprived matter of its very materiality by stamping this energy as spiritual.

Of the other views, two seem to be of great importance and have a close affinity with up-to-date conceptions. First, Descartes held that things in the external world including our bodies are made of matter, and that the essential property of matter is extension—a complex of length, breadth and thickness. Other properties of things such as solidity, shape, size etc., 'belonging to' matter as their substance. He virtually identified matter with extension and therefore with space. Secondly, Locke understood by matter "nothing but the supposed, but unknown, support of the sensible properties of things." It is the unkown x, the underlying substance or substratum of qualities holding them together. The qualities alone are known, the matter remaining ever unknown. He distinguishes between primary and secondary qualities, and says that only the primary qualities, such as size, shape, solidity, etc. are objectively contained in matter, while the secondary qualities, such as colours, tastes and smells, do not exist in things as such but only as *powers* to produce various sensations in us by means of their primary qualities.

3. The Atomic Theory

Modern science takes up the problem of the ultimate nature of matter with great seriousness and has already made some startling findings. These findings are revolutionary in the sense that they are results of concrete experimentation and mathematical calculation; while the method of philosophy or older science has been one of speculation and logical analysis. In this scientific venture the role of chemistry and mathematics has been central, and the success has been attained in two broad stages.

The first of these stages is the 'atomic theory,' according to which matter is not continuous but granular, and its ultimate constituents are atoms. Atoms are the minutest particles of matter in the sense that they cannot be more minute or further divided. They have all the essential or primary qualities of matter; while the secondary qualities result from their different positions, arrangements and motions. They are extended, impenetrable and absolute solids having no pores or vacuum within them. They are inert—that is, they begin or cease to move only owing to some external force. There are ninety-two kinds of atoms, i.e., ninety-two

elementary kinds of matter—e.g., carbon, oxygen, nitrogen, hydrogen, calcium, etc. The atoms differ in weight ranging between the hydrogen atoms which are the lightest and the uranium atoms which are the heaviest.

The atomic conception of matter is first advocated by Democritus in the West, and in India by the Sage Kanada, the founder of the Vaisesika system of philosophy. Its revival in modern times is to the credit of John Dalton (1766-1844) and some other scientists. By this theory the world is reduced to a gigantic heap of atoms, and the countless variety of things to a few simple elements. Material kinds are either simple or compund, the former being called elements. If we divide an element we shall arrive directly at the atoms. But if we divide a compound we shall first arrive at very minute particles, called 'molecules', which bear the peculiar properties of the compound. But further analysis will lead us to the smallest particles, the atoms, which do not bear the properties of the compound but only those of the component elements. For example, water is a compound of two elements—hydrogen and oxygen. One molecule of water is composed of two atoms of hydrogen and one atom of oxygen. The properties of a molecule of water are different from the properties of hydrogen and oxygen atoms.

4. The Dynamic or the Electronic Theory

Further researches in science have led to what may be called the 'dynamic' or the 'electronic' theory of matter. Atoms have been found to be radically in disagreement with the conception of the older atomic theory. They are neither simple, nor inert or impenetrable. They are further divisible into still smaller parts which are themselves of the nature of electromagnetic energy. These energy particles are either positive, i.e., of positive electrical charge, or negative or even neutral, and are respectively called protons, electrons and neutrons. Of late some other mixed kinds also have been discovered. Each atom is, in fact, of the model of our solar system, in which there is a nucleus composed of protons and neutrons, round which one or more electrons revolve. Atoms differ in the number and configuration of the constituent particles. The weight of an atom is determined by the number of particles in the nucleus, the electrons having very little weight. For example, a hydrogen atom, being the lightest, has only one electron and one proton; whereas a uranium atom, being the heaviest, has a nucleus containing as many as 92 protons and 143 neutrons.

Lord Kelvin, Neils Bohr, Ostwald, Rutherford, *et al.*, have been the chief exponents of this electronic theory. It has reduced matter to energy, depriving matter of its gross materiality. On the other hand, energy is also

found to be made of particles. Light energy, for instance, consists of very minute particles called photons. So the age-old distinction between matter and energy is virtually gone.

5. The Nature of Life

Life or vitality seems to constitute a unique property of certain kinds of things. To the popular view, things appear to display a four-fold distinction :

(i) Between an ordinary inert object like a stone and a machine which is capable of internal or external motion;
(ii) Between a machine and a living being;
(iii) Between bare life and mind or soul; and
(iv) between mind and God, or between ordinary mental power and divinity.

While in an ordinary object parts constitute a mere aggregate, in a machine they are so collocated and adjusted that they come to possess an integrity, and co-operate so as to produce a certain common result. In the former, parts form a mere collection; in the latter, they constitute a real unit. It is therefore that a machine displays certain properties, such as internal movement, which are foreign to an ordinary thing. But a living being is conceived as something essentially different not only from an ordinary non-mechanical object but even from a machine. Hence the sharp antithesis between mechanism and organism. An organism or a living being possesses all the properties of a machine; but in addition it has 'something' wanting in the latter. This popular view rests upon the apparent difference between the properties of a machine and those of an organism. Then, what is that difference?

6. Mechanism vs. Organism

A machine and an organism have, between them, certain evident points of similarity as well as difference.

(a) Similarity : Both are composed of parts unlike a relatively simple thing, such as a piece of gold or a stone. (We do not so far definitely know of any 'absolutely' simple thing.) In both, parts are collocated and adjusted in a certain way, so that one affects and co-operates with another. In both, parts work to produce a joint result or serve a common end.

(b) Difference : A machine is artificial, while an organism is natural; one is made while the other grows. In a machine the parts are set together and adjusted by an external agent; but in an organism the parts are internally fitted and adjusted. In the latter, while not in the former, the

organisation comes from within and is centrally regulated. The end which a machine serves lies in the external agent that gives it form and sets it to work. But the end which an organism seeks lies within itself. In both, the whole cannot be there apart from the parts. But while in an organism the parts cannot live apart from the whole, in a machine the parts can continue in the same conditions, though deprived of their assigned functions.

Apart from these 'apparent' points of difference, there are certain other points of greater moment. The intrinsic vitality of an organism is displayed most generally in the very facts of its irritability and responsiveness to external stimulation. Its spontaneous energy works according to the laws of an inherent two-fold purpose: the preservation of its own self by assimilation of external materials, and the perpetuation of its species by means of reproduction. Throughout its whole nature spontaneity or self-direction reigns. It is self-growing, self-protecting, self-adjusting, self-reproducing and so on. In its higher species it displays certain other distinctive properties, such as sensibility, selective choice, memory, intelligence and consciousness.

This being the distinctive features of an organism, how to explain them? Different answers have been offered by philosophers and scientists and accordingly we have different theories about the nature of life.

7. Mechanism or the Mechanistic Theory of Life

According to this theory, an organism is not essentially different from an ordinary machine. Its apparently unique features outlined above can be explained by the same physico-chemical laws by which the behaviour of a stone or a machine can be explained. The difference between them is not qualitative but only quantitative. That is, an organism is only more complex in structure than a machine; and its laws of behaviour are only more complex forms of the same laws of simple physico-chemical reactions as characterise the other. The peculiarities of an organism are not due to any separate vital principle, as the vitalist manitains. In fact, vitality is only a more complex and more developed form of materiality. It constitutes no separate category. In respect of neither elements nor of causality, are a living and a non-living body different. In both, the elements are material and their laws of operation mechanical.

The beginning of the mechanistic view may be traced back to the Carvaka School of ancient India and the atomists of early Greece. In modern times, it has passed through Descartes and Newton and, quite recently, through Herbert Spencer, T.H. Huxley, Jacques Loeb and many others. In general, it is a regular (necessary) associate of materialism and

naturalism of all types, and an integral part of the broader theory of mechanical evolution. Accordingly, mechanism lays stress on continuity between the different forms of being from the simplest to the most complex, and also on a corresponding continuity between the sciences. Life being only a mechanical resultant of general physico-chemical forces, the biologist studies fundamentally the same types of phenomena, the same reactions between mass particles, as are studied in physics and chemistry. Biology is thus only an extension of the general sciences of physics and chemistry.

8. Arguments for Mechanism

Arguments on the side of mechanism are mainly as follows :

(1) Life is not a mystery. It is what it does, i.e., the operations and processes within the living body. Hence, if these operations and processes themselves are adequately explained on a mechanistic basis, life itself is so far explained. To conceive life as something mysterious is a superstition, and vitalism is actually an unscientific extension of that superstition to the scientific sphere.

(2) Historically, many organic phenomena (e.g., production of bile, movements in response to stimuli) were regarded until recently as unsusceptible of mechanical explanation. But in course of time they have all been mechanically explained. This yields support to the mechanists' claim that with further advancements the remaining phenomena will also be similarly explained.

(3) Biology has certain general relations with other sciences of a thoroughly mechanical nature. Organisms have certain apparent points of similarity with the inorganic bodies whose laws are thoroughly mechanical. The general laws of matter and conservation of energy are equally true of them. The analysis of living cells shows that their ultimate ingredients are the same as those of ordinary inanimate objects—the same carbon, oxygen, hydrogen, nitrogen, calcium, etc.

(4) It has been possible to produce artificial structures that successfully imitate organisms. Some processes which were originally exclusively organic are now mechanised—artificial fertilisation and hatching, for example. All these point to the possibility of a thorough-*going mechanism in biology.*

(5) Mechanistic explanation is alone intelligible. Physical and chemical processes can be made objects of direct observation and analysis and, when so observed and analysed, they are fully understood. Accordingly, life is understood only insofar as it is reduced to such processes.

(6) Mechanism is also the common ideal of all sciences. The most exact natural sciences are physics and chemistry. and they each are mechanistic. The more advanced and precise a science becomes, the more mechanistic it is.

(7) Vitalism, in assuming a vital force, violates the law of parsimony, according to which, scientific explanation must not assume any entity unless it is absolutely necessary.

9. Vitalism or the Vitalistic Theory of Life

Vitalism is the direct opposite of mechanism. According to it, an organism differs from an inanimate body, in respect of its elements as well as its laws of behaviour. The material body is not the whole of an organism. There is something more in it—a unique non-material principle. This 'extra' cannot be reduced to ordinary physical elements, nor can its behaviour be explained mechanically, i.e., as the bare resultant of simple physical-chemical forces. The distinctive properties of an organism, or its distinct modes of behaviour, are due to this non-material principle. Life thus differs qualitatively from bare matter. It is not merely a more complex form of it, but constitutes an altogether separate category. Biology is an independent science.

Vitalism appears in a crude form in Aristotle and is held generally by the Mediaeval thinkers. The modern period beginning with Descartes is predominantly mechanistic. But vitalism begins to reappear, in more or less different forms, towards the beginning of the current century, with the German biologist, Hans Driesch, as the leader. "Life", said he, "...is not a specialized arrangement of inorganic events; ...life is something apart, and biology is an independent science."[1] Vitality is due to a non-material factor in organisms which he called 'entelechy' or 'psychoid'. Even apart from his close successors, his general position has been accepted by many scientists and philosophers, viz., J.A. Thomson. A.P. Mathews, John Burroughs, Benjamin Moore. William McBride, and so on. Under the pressure of mechanism, however, many prefer to avoid the term 'vital principle', and coins other phrases to describe the inherent organic quality. For instance, Thomson describes it as "originative impulse"; Benjamin Moore as 'biotic energy', Mathews as 'struggle for freedom'.

10. Arguments for Vitalism

(1) Organic behaviour has certain traits which are not only absent from the behaviour of the non-living, but are in fact inconsistent with the very concept of mechanism. One of the most important of these traits is

purposiveness. A living body is, while a machine is not, a teleological entity. Its behaviour is directed towards some ends. It seeks to live and thrive and, to that end, adjusts itself to its enviornment. Even when an amoeba moves towards its food and away from something harmful, its behaviour directly relates to the welfare of the organism as a whole. But the behaviour of an engine may be fatal just as well as congenial to itself. Even if an organism is to be called an engine, it is, in the words of Thomson, "a self-stocking, self-repairing, self-preservative, self-adjusting, self-increasing, self-reproducing engine."[2] In other words, it is a teleological engine, and hence not an engine at all.

(2) Another important trait is indeterminacy. While the behaviour of inanimate bodies, including the most delicate machines, is determinate and predictable, that of organisms is at least to a certain degree indeterminate and unpredictable. A thrown piece of stone will move on or stop just in accordance with environmental conditions, and not from any inner impulsion. Hence its behaviour is determined and can be predicted by a dynamicist. But if an ant meets an obstacle in its journey, it goes round it. If disturbed, the bee flies away in one of an indefinite number of possible directions; and a plant tries one type of reaction or another according as its enviromment places one or another sort of demand upon it.[3]

(3) Recent experiments have shown that some vital processes, such as respiration, nutrition, self-repair, secretion, circulation etc., can be explained only by teleological causation. These processes involve complex physiological mechanism and manifest a high degree of unity and coherence, which can be understood only by supposing that organic behaviour is purposive, that is, seeks the realisation of some goals or 'norms.'

(4) Sometimes it is argued that a mechanical account of biological phenomena is simply 'inconceivable'. Biological mechanism is absurd on the face of it. The gap between mechanical behaviour (e.g., a falling body) and complex organic behaviour (e.g., a delicate surgical operation) is so terribly wide that it cannot be regarded as merely quantitative. A mere increase in the complexity of mechanical processes cannot acount for the distinct peculiarities of organic behaviour. The complexity of organisation in matter that a mechanist might require to explain life would be too great to be conceived.

11. Comments

(a) The first argument of the mechanists is obviously valid; but it simply defines the issue and may therefore be quite acceptable to the

vitalist. As for the fifth argument, the question is whether mechanistic or vitalistic explanation is intelligible in the present context. To suppose, therefore, that mechanism is alone intelligible is only begging the question. The second, third and the fourth arguments are the most weighty ones. If progress in biology has generally been along the machanistic line, if the ultimate ingredients of an organism are nothing but material particles, and so on, then mechanism has a really strong case. But this does not certainly grant it the final victory.

(b) On the side of the vitalists, the argument that mechanism is 'inconceivable' is of very little importance. In respect of value, it compares well with its antithesis that mechanism is alone intelligible. The other arguments are evidently quite strong. But it must be noted that there is no general agreement among biologists over them. The arguments from purposiveness and indeterminacy may be due to our imperfect knowledge about the deeper secrets of organic behaviour. Purposiveness may be an anthropomorphic projection, and indeterminacy a matter of ignorance.

(c) On the whole it seems that the duel between mechanism and vitalism cannot be decided immediately, but only in times to come. Both of them present an ideal in the matter of scientific explanation. The fate of these ideals will be determined by further facts of observation, and not *a priori* by any abstract theorization. But it is apparent that mechanism is more conservative in outlook than vitalism, which may, therefore, find less favour with common sense and religion. And, historically, vitalism constituted the thesis, and the responsibility of proof still lies with mechanism as its antithesis.

(d) We must notice that machines are made and they lack the power of maintaining or adjusting themselves and of perpetuating their kind. But organisms 'grow' and are spontaneously endowed with these capacities. It appears from the evidences at our disposal that these unique properties of living beings can be explained only by a new organizing power, a new category, viz., life. This category need not be altogether separate from matter, but may emerge together with matter out of a neutral stuff. Hence a better solution seems to lie in a synthesis of mechanism and vitalism, like the one furnished by the theory of emergent evolution.

12. The Synthetic View of Life: the Emergence Theory

The extremes of mechanism and vitalism seem to be reconciled in the theory of Emergent Evolution. According to this theory, life (and also mind) is, in a sense, both identical with and different from matter. It is identical, because the ingredients of an organism are thoroughly material.

It is different, because life possesses new capacities and exhibits new laws of behaviour. This paradoxical situation has been possible through a process of evolution which is creative and progressive in nature.

Lloyd Morgan and Samuel Alexander (1859-1938) of Great Britain are the chief exponents of this theory. In spite of certain points of difference, their views of the nature of evolution are essentially the same. While Morgan maintains that the basic stuff of the world is matter, Alexander maintains that it is simpler, i.e., it is bare space-time or pure motion. But both are of opinion that life has evolved out of matter, so that, in respect of its elements, it is the same as matter. But once evolved, life constitutes a 'new and higher' category and cannot be identified with matter. Evolution is a process in which material particles come into ever fresh and more developed organisations, and attain a higher level of complexity and integration. Organic behaviour is due to this higher organisation and higher complexity. So life emerges through a sort of creative synthesis in matter which is charged with *a nisus* in that direction. Life is not a 'resultant' of simple combination of material particles; it is an 'emergent' in which such particles are organised in a unique manner. In a machine also there is organisation; but an organism represents a far higher sort of organisation, which is the source of distinctive organic traits. Thus life is not simply a more complex machine as mechanism supposes, nor a mysterious vital principle as vitalism upholds. It is matter, but matter at a far higher level of development.*

13. Comments

(1) This evolutionary account of the nature of life seems to carry satisfaction from two directions. First, it aims at resolving the acute controversy between mechanism and vitalism by giving partial recognition to both of them. Secondly, it is, on the one hand, consistent with the scientific conviction that there is no hiatus or gap in nature, all things having a basic unity and connection. On the other, by granting a distinct and higher status to life, it gives a better recognition to certain broad facts than sheer mechanism, and comes closer to common sense.

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* It is thus a certain constellation or complex or collocation of physico-chemical processes which behaves vitally, and the presence of such constellations is what makes the structure to which they belong an organism. To call it organism is but to mark the fact that its behaviour, its response to stimulation, is, owing to the constellation, of a character different from those which physics and chemistry are ordinarily concerned with, and in this sense something new with an appropriate quality, that of life. (S.Alexander : *Space, Time and Deity*, Vol. II, page 62)

"Life is thus intermediate between matter and mind. It is also material in that it is explicable (and we may hope may be expressed hereafter) in material terms, but it is not purely material. Life is not an epiphenomenon of matter but an emergent from it." (*Ibid.*, page 64).

(2) This theory emphasizes the distinction between 'mechanism' and 'organism' which seems to find favour with most of the present-day scientists and philosophers. "Science", as Prof. Whitehead puts it, "is taking on a new aspect which is neither purely physical, nor purely biological. It is becoming the study of organisms. Biology is the study of the larger organisms, whereas physics is the study of smaller organisms."[4] 'Organisation' appears to be a key-concept everywhere in science. Even electronic particles exhibit organic relations inside an atom, and do not appear to be absolutely subject to mechanical laws (cf. Heisenberg's uncertainty principle). Evidently, mechanism and vitalism are both losing their ground.

(3) But it is obvious that the emergent view of life stands or falls with the general theory of emergent evolution. The concept of emergence is not without its critics. It is sometimes compared with a queer being that combines in its structure the limbs of contrary types of animals. To say that a living body is thoroughly reducible to material elements and yet constitutes a fresh, distinct and higher category, is considered illogical. But, on the whole, it cannot be denied that, at least in spirit, it is better than either mechanism or vitalism. On the one hand, it is not inconsistent with facts as they appear; on the other, it represents a synthetic attitude which is wholesome and more or less in agreement with our value-consciousness.*

* Vide--Chapter on Evolution for a fuller grasp of the theory of emergence.

CHAPTER XI

THEORIES OF ORIGIN AND DEVELOPMENT

1. Creation and Evolution

By now we have had some idea of the general nature of the world, and we shall have more from our ontological considerations. Meanwhile let us try to enter into the mystery of its origin, growth and development.

The question of origin may be said to have two complementary aspects. First, how could there be a world or any existence at all? Secondly, how could the world come to be what it is, i.e., to possess so many kinds of things? Common sense and religious dogma answer the first question by their belief in a supreme being, namely, God. Since God is believed to be eternal or self-caused, the question is apparently answered. Philosophers do not always take special interest in this question and usually take for granted some ultimate being as eternally there. Sometimes, following religion, this first being is called God; but more often it is called the ultimate reality, noumenon, the Absolute, or simply Nature.

As to the second question, the traditional answer of religion and common sense is the old theory of special creation. Sometimes philosophy also has held a similar view. But the more widely held view in the scientific and philosophical circles is the theory of Evolution.

2. Origin or the First Being

The question as to how there could be anything at all is no doubt very interesting. It seems to be the most fundamental philosophical problem, having great bearing on the less fundamental problem of the 'nature' of the world. At the same time, it does not look easy to answer.

The traditional religious answer by the supposition of the eternal divine being is a matter of belief. Science is not interested in any such ultimate issue and starts with the broad fact of experience that nature *is* there. Such an attitude does not befit the philosopher. But philosophers have actually been concerned more with describing the basic stuff and

structure of the world or explaining its basic principles than with accounting for its existence. Their answer to this question has in most cases come by the way.

Plato solved the problem by his notion of *eternal* ideas, Spinoza and Leibniz by the notion of substance. Hegel discovered the existence of the world in the necessity of thought. Some philosophers have likewise maintained that the first being is an uncaused cause, existing as the necessary ground of the world of experience which is relative and contingent in character.

It must be noted that the question is not 'whether' but 'why' there is any being. The 'whether' may be satisfied by the notion of eternity. As for the 'why', either we shall remain silent and simply accept some being as ultimate and eternal, or we must show that such a being is *necessary* in character—that is to say, it is such that it cannot help existing. Its existence, in other words, is a demand of reason. In this sense the implied answer in the thought of Spinoza and Hegel is quite agreeable. But it cannot be said that they have proved their answer beyond dispute.[1]

3. The theory of special creation

According to the theory of special creation, the world with all its different kinds of beings was created all at once by the supreme being, God. The various contents of the world, such as the stars, planets, plants, animals, etc., have not come out of a simple original stuff through gradual change, as the theory of evolution supposes. They were fashioned all together by their creator at a particular time. This theory is upheld mainly by traditional or popular religion. The Bible (Old Testament), for example, starts with an account of creation in which God is said to have created the world in six days and to have rested on the seventh day. Everybody knows the diverting story of God's creation of Adam and Eve.

But creation may be either absolute (creation ex nihilo) or conditional.

(a) In absolute creation, God creates the world out of nothing, simply by a fiat of His will. There was a time when there was nothing but God. Since He is an all-perfect being, he had no need of a world. But afterwards he felt the need of a world to which he might communicate His blessings. And then he said, 'Let there be a world', and the world came into existence. In order to produce any particular object or species, he simply uttered 'Kun' or 'Be', and it was.

(b) In conditional creation, God creates the world out of pre-existent matter. This view is rejected by religion, but upheld by some philosophers. For example, long ago Plato miantained that God created the world out of

matter. by fashioning lumps of matter after the eternal ideas (archetypes or forms). Corresponding to every being, a cow for instance, there is an idea which contains its essence. God produces the cow by fashioning a lump of matter after the idea of cow.

4. Comments

(a) Creationism, or the creationist theory of the origin of the world. does not seem to be satisfactory for several reasons. One of the salient features of the theory is that it conceives God as eternal and all-perfect, living alone in a blank or material universe. He created the world not from any feeling of need or imperfection, but simply in order to manifest His power and communicate His blessedness. But if God is all-perfect, there cannot be a universe, blank or material, by His side. This and also the supposition of His creation of a world reduces Him to an imperfect finite entity. Moreover, a perfect being cannot be said to have a desire, even a desire to create.

(b) Another salient feature of the theory is that God creates either out of nothing or out of matter. But logic demands that out of nothing, nothing alone can be produced. Creationists generally argue that God can create out of nothing, because He is perfect and, therefore, all-powerful. But if God is perfect, He cannot be irrational. It is also difficult to conceive how bare matter could be a sufficient condition of creation, or even how matter could be eternally present.

(c) The third important feature of the theory is that it conceives God as external to the world. As the deists maintian, after creation God leaves the world to itself and interferes only when it goes out of order. This, again, reduces God to a status of finitude and imperfection.

(d) The theory evidently involves a crude type of anthropomorphism. Plato's God is very much like a potter. God is painted as an inefficient mechanic whose works require mending. It is also not obvious from the course of things (e.g., the existence of evils) that God created from a motive of communicating blessedness. In short, the theory does not stand to reason; and may remain simply a matter of faith. It appears more logical to suppose that God creates only in the sense of manifesting His infinite energy in different kinds of things and events.[2] God does not design and manufacture like a human craftsman, from outside the world. He is within it, and creation means the coming of one thing or one species out of another through gradual change. This is evolution and science has accumulated ample facts testifying to the truth of it.

5. The theory of Evolution

According to the theory of evolution. the world with its various types

of beings has come out of an originally simpler condition through a long process of gradual transformation. It contradicts the theory of special creation. The world is not created all on a sudden by an all-powerful Deity. It began its life in a simple chaotic condition, and only gradually has it become more complex and orderly. Originally it was devoid of the variety of kinds that are now displayed in it. But it has changed ceaselessly and has, step by step, ascended up the ladder of progress.

The word 'evolve' derives from the Latin 'evolvo' which means 'to unroll' (e=out, volvo=to roll). Thus evolution is the process of the world's unrolling. This unrolling is a process of gradual and orderly change and is opposed to revolution which is abrupt and disorderly. 'The term 'evolution' implies the appearance of some new pattern, or type, as the result of a long series of causally continuous changes." (Drake).

Herbert Spencer (1820-1903), in his *First Principles,* mentions three phases of the process of evolution:

(1) Concentration (or Integration) : The elements of things are initially in a diffused and chaotic condition, but gradually they are concentrated or combined into more and more determinate systems. Thus, for example, the solar system resulted from the concentration or integration of nebular elements which were in a state of diffusion and agitation. Organisms arise through absorption into organic tissues of elements scattered about in the environment.

(2) Differentiation : Evolution is a process of bare concentration in its primitive stages. As the process advances, differentiation begins within the integrated systems. This is a transition from homogeneity to heterogeneity. For example, after the primitive nebulae were concentrated into a system, many smaller systems, such as stars and planets, arose out of it through differentiation or self-division within it. Various organs of a living body develop in the same way.

(3) Determination : But differentiation must again pass on to concentration. Otherwise, evolution is reduced to devolution or dissolution. Differentiation does not mean ordinary dissolution of parts. In each differentiated part, again, integration takes place, so that it becomes a system within a larger system. For instance, the organs of a living body develop, first, by differentiation from the whole and then by integration within themselves. Thus evolution proceeds by alternate integration and differentiation. The combination of these two is 'determination'. By integration and differentiation evolution passes from less determinate to more determinate conditions, from the less coherent to the more coherent. Evolution has a determinate direction. While dissolution is a

backward movement of regress, determination is an onward movement of progress.

6. Classification of the theories of Evolution

The notion of evolution can be traced back to the earliest periods of the history of philosophy. For example, we find germs of it in the thoughts of Anaximander (611-546 B.C.), Anaximenes, Empedocles, etc. and also in the Sankhya and the Vedanta systems of Indian philosophy. It is, however, only during the last two centuries, and particularly since the publication of Darwin's *Origin of Species* (1859), that the notion has come into utmost prominence and played a key-role in both science and philosophy.

Modern theories of evolution are in fact many and various. This diversity arises from three pincipal sources:

(a) First, the concept of evolution may be applied to different departments of nature, or different spheres of change and variation. Broadly speaking, we may apply it to inorganic material objects, to organic living bodies, or to human society. Accordingly, we have theories of *cosmic*, *organic* and *social* evolution.

(b) Secondly, we may ask about the exact 'nature' of the evolving process. It may be either a process of mere repeating the old in fresh forms, or a free creative process in which altogether new types of things come into being, without necessary relations to the past. Or, it may be a sort of synthesis of these two, in which new types emerge out of the old; so that the former are reducible to the latter, and are yet possessed of new distinctive features. Accordingly, we have theories of *repetitive*, *creative* or *emergent* evolution.

For example, according to the repetitive theory, when life comes out of matter, it is merely a repetition of the same matter, though in a more complex form. That is to say, life is only more complex matter. Their difference is quantitative, not qualitative. In the creative view, life is something entirely different from matter; its essence and laws of behaviour are not determined by those of matter. The emergent theory seeks a sort of compromise between these two extremes. According to it, life is the same as matter and is yet different. It is the same, because its elements are material particles; it is different because its elements come into new relationships, so as to display new characteristics and new laws of behaviour.

(c) Thirdly, we may consider the causal forces operative in the evolutionary process. Such forces may be purely mechanical, in which

there is no purpose or goal. Or, they may be purposive in character. Accordingly, we have *mechanistic* or *teleological* theories of evolution.

It may be noted, however, that these varieties are or may be overlapping, since they rest on three different principles. We shall see presently that the repetitive theory, for instance, is also mechanistic. Let us now consider some of the important theories of evolution.

CHAPTER XII

THE MECHANISTIC THEORIES OF EVOLUTION

1. General expostion

A mechanistic theory of evolution maintains that the world with its multifarious kinds of beings has evolved out of a primordial stuff through a gradual process of mechanical change. It has two broad aspects: one as to the cause of evolution, and the other as to the the result of the process.

(a) According to it, there is no plan or purpose, either divine or otherwise, behind the evolutionary movement. Mechanism, as opposed to teleology, means a process in which an effect follows from a cause through spontaneous interaction among its elements. The effect is entirely due to the immediate antecedent conditions and must necessarily follow when the conditions are there. The universe is governed by the law of rigid uniformity.

(b) In the process nothing really 'new' comes out of the old. There is strict continuity between different stages of evolution. The latter stage is merely a repetition of the previous one, though in a more complex form. Every effect is proportionate in substance and energy to its cause. As it is said, it is a 'resultant' and not an 'emergent'. Mechanism denies real qualitative distinctions among things. Thus an animal is only a more complex machine, and a man a more complex animal. Everything is made of the same physical ingredients governed by the same mechanical laws.

A mechanistic view is materialistic, since it reduces everything to physical elements. This, of course, is only usually and not always the case. Mechanism, as a view of causality alone, may exclude thorough-going materialism and attribute a non-material origin to life and mind. Even Darwin and Spencer did not assert that life came out of matter. It is deterministic, because there can be no freedom in a world which is without purpose and thoroughly ruled by uniform laws. It is naturalistic, since it tries to explain every phenomenon by natural causes. Lamarck, Darwin, Tyndall, Spencer, T.H. Huxley, Loeb and others are its chief exponents, in some form or other.

2. The mechanistic theory of Cosmic Evolution

According to the mechanistic theory of cosmic evolution, the solar system has gradually evolved out of a primitive nebular condition. It has not been created by God all of a sudden purposefully. This 'nebular hypothesis' was anticipated by the German philosopher Kant; it was fully expounded by Laplace and incorporated by Herbert Spencer into his general theory of evolution.

The matter of the solar system was originally in an extremely 'diffused' condition, in the form of a nebula, a cloud of dust or vapour. Its atomic ingredients were kept diffused and agitated by motion according to known physical laws. But as motion dissipated gradually, the nebular mass began to condense by gravitation towards the centre of greatest density. Thus it began to revolve about the centre. With increase in condensation, the revolution became more rapid, and some smaller masses of the revolving cloud were thrown off. They went on revolving about the central mass as well as their own centres, and became planets. Some of them, in course of further condensation, threw off still smaller portions, which became the satellites or moons. The central mass became the sun.

Thus, in a nutshell, the solar system evolved out of material particles according to strictly mechanical laws. Originally its stuff was fiery, diffused and homogeneous, and gradually it became cooler, combined and heterogeneous. Herbert Spencer explains this process by his principles of integration and differentiation. The primitive elements were integrated and then differentiated into the sun and the planets. The planets, again, were integrated and differentiated. Further integration and differentiation on earth produced land, water, air, and so on.

3. Biological Evolution

The problem of biological evolution has two aspects, of which the first concerns the origin of life, and the second is about the origin of species.

(1) Supposing that the earth has evolved out of a nebula, how could life appear first in its originally material condition? We may answer that life is a special creation of God, or that it has come from some other planet. This is the 'biogenetic view' of life. Or we may say that life has evolved out of lifeless matter. This view is called the 'abiogenetic' conception of life.

(2) As to the second aspect of the problem, our question is : Given that life has already appeared, how could the innumerable 'species' arise? Again, similar answers may be offered. It is obvious that the supposition of the planetary transmission of life or of its species is no final answer to

our question. The other answers we have already considered in brief. It remains for us to enter into certain details.

4. Lamarck's theory of Biological Evolution

The French naturalist, Lamarck (1744-1829), propounded a theory of mechanical evolution of species at the beginning of the nineteenth century. He rejected the old theory held by Plato and Aristotle that organic species are immutable and maintained that various species have arisen out of simple beginning through gradual evolutionary change. The main principles of evolution, according to him, are as follows :

(1) Modification by environmental influence : Environmental forces are constantly acting upon organisms. With a view to self-preservation, organisms are prompted to react to such forces. Organic forms are thus gradually changed, and different organs and limbs are developed to suit the circumstances. For example, circumstances compelled organisms to crawl or swim or to move otherwise. Accordingly, different organs of locomotion began to develop. Different sense-organs, such as eyes, ears, skin, etc., developed in response to different forces such, as light, sound and heat.

(2) Organic needs or desires : Environmental forces produce in an organism different needs and desires. This leads to efforts for developing appropriate organs to perform the necessary functions. Thus, there is first a need and a desire to see, hear, smell etc., and then the eye, the ear and the tongue are evolved.

(3) Use and disuse : The organs in rudimentary forms are further developed and strengthened by use, and weakened by disuse. That is, if they are constantly put into operation, they develop; but if they are left unused, they gradually deteriorate and may even disappear.

(4) Inheritance of acquired characters : The modifications acquired in one generation are transmitted to the next one, and thus go on accumulating from generation to generation. New species arise when such modifications attain to a certain level.

All these four principles may be explained by a simple concrete example. The ancestors of giraffes did not have a long neck. Environment required them to develop a suitable organ to procure food from long trees. Accordingly they constantly strectched their neck, and the acquired length was inherited by their offsprings. The length of their neck being thus accumulated through generations, the new species of long-necked animals, i.e. the giraffes, appeared.

5. Darwin's theory of Biological Evolution

The theory of biological evolution of Charles Darwin appeared in his

works. *Origin of Species*[*] and *Descent of Man*, published in 1859 and 1871 respectively. His theory does not explain the first origination of life. In his first work he mentions life as having been 'originally breathed by the creator into a few forms or into one." His theory tries to explain how various species have evolved out of the original organic forms.

He rejects the theory that organic species are created and do not change. On the contrary, he maintains that there is abundant empirical evidence to the effect that species have 'evolved'. First there were one or a few simple protoplasmic cells. Different species have gradually evolved out of them through a certain natural process. This process is described by him as one of natural seleciton. Factors of this process are as follows:

(1) Struggle for Existence : All living creatures have a basic tendency to preserve and develop themselves. But since they multiply too rapidly, nature cannot provide them with enough room and food. Hence follows a struggle for existence, a tooth-and-claw competition for survival, in which only the fittest win.

(2) Variation : The fitness is determined by the possession of characteristics favourable to the organism in the conflict. These characteristics are variations among individuals. Even from the beginning variations in the living cells are spontaneously and constantly going on. Such variations are exceedingly minute; and because they cannot be explained by our knowledge of organic structures, they are fortuitous or chance variations. Individuals of the same species, even of the same parents, are more or less different. Those having advantageous variations win the battle for existence against those having unfavourable variations. In other words, the former can adjust themselves to the environment, while the latter cannot.

(3) Heredity : These 'chance variations' of one generation are transmitted to the next one by heredity. Variations thus go on accumulating. If the variations are favourable, a species continues to survive through generations, and in course of time it varies so much as to become a new species. And if the variations are unfavourable, the species gradually dies out. Scientific observations have shown that numberless species, once alive, gradually became extinct. This is the 'survival of the fittest', 'the preservation of the favoured races'. This is Nature's selection, the selection of the fittest for survival.

Darwin differs from his predecessor, Lamarck, in important respects. In oppositon to Lamarck, he maintains that organic variations are

[*] The full title of his work is 'The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life.'

fortuitous and not caused by environmental forces. Organs precede functions. That is, there is first the spontaneous evolvement of a suitable organ, and then it assists the animal in its function of adjustment. Use and disuse also have no role in evolution.

6. Comparison of Darwin with Lamarck

Both Lamarck and Darwin reject the theory of fixed and 'immutable' species, and maintain that species are results of evolution. Neither of them believes in purpose in the evolutionary process. Both of them are thus mechanistic and naturalistic in their outlook. Yet there are some important points of difference.

(1) According to Lamarck, variations are imposed on organisms by environmental factors; they are 'acquired' through interaction between the two. According to Darwin, variations are spontaneous and fortuitous, in which the environment has no role. (Of cuourse, in his later views, Darwin recognised other principles besides fortuitous variation, including Lamarck's principle of modification by environment.)

(2) While, according to Lamarck, acquired modifications are inherited; according to Darwin, only chance variations are inherited. Thus Darwin denies that a blacksmith's children, for example, inherit the muscles or skills which their parents acquire through practice.

(3) On the former's view, functions precede organs; on the latter's view, organs precede functions. Or again, while in Lamarck the struggle for existence makes the organs possible, in Darwin the organs make the struggle possible.

7. Comments

(a) The great merit of Lamarck and Darwin is said to consist, respectively, in formulating for the first time a complete theory of biological evolution, and producing enormous factual evidence in support of that theory. Their views find immense favour with scientists and naturalist philosophers, since they leave no room for any supernatural agent in their accounts. But their views are attacked in the main from two different quarters.

First, orthodox religion finds them highly objectionable, because they tell upon the status of God as the creator and sustainer of the world. Secondly, they are subjected to the charge that they try in vain to explain evolution by a denial of purpose in nature. In fact, this is a charge that is brought against mechanism in general by the teleologists, i.e., those philosophers who believe that the phenomena of nature cannot be

explained except by the supposition of some mind or cosmic purpose working behind them. It is said that so complex and marvellous a process as that of the evolution of species cannot be left to sheer chance variations or modifications by environment.

(b) Their views rest upon certain assumptions which are left unexplained—for example, Lamarck's notion of organic needs and interaction between organism and environment, Darwin's notion of struggle for existence and fortuitous variation, and their joint belief in heredity. These are alleged to be only so many mysteries. All these rather point to an inner vital urge, a primordial impulse in the very nature of life. Lamarck dimly feels it when he talks of organic needs, but none of them fully realises that the secret of evolution may be said to lie only in such a more ultimate principle. In fact, both Lamarck and Darwin provide us with abundant 'facts' about evolution, but none seems to have 'explained' their cause.

(c) Their conception of heredity has been questioned. Weismann has shown that only variations in germ-cells, and not those in body-cells, are susceptible of hereditary transmission. The apparent heredity of somatic cells is social and not biological (Vide—Weismann's theory).

(d) Hugo de Vries has pointed out that sometimes species arise by 'mutations', i.e., great abrupt changes, and not by slow gradual variation.

It may be observed that the original theories of Lamarck and Darwin have indeed undergone modification and enrichment. There is, as it were, evolution within the theories of evolution. But of the charges brought against them, the first one is of no value. The concept of evolution is not necessarily inconsistent with divine creativity; and at any rate, scriptures must be interpreted in harmony with the hard facts. Nor is the lowly origin of man, as shown in theories of evolution, irreconcilable with his mental superiority or unique status in the scheme of things. The charge from the side of teleology is also weak. Evolution cannot be said to be teleological till the emergence of conscious and purposive beings like man,

8. Evolution since Darwin : The theory of August Weismann

Since Darwin the evolutionary theory of species has undergone many changes in respect of its details, although the general outline of Darwin's theory still remains foundational to biological sciences. Of these changes two are most radical and important. One is the theory of germinal heredity of August Weismann, and the other is the theory of mutaiton of Hugo de Vries. Researches showed Weismann that :

(a) Hereditary transmission is true only of germ-cells. Living bodies have two different kinds of cells: the somatic cells or body-cells, and

germ-cells. These kinds of cells are virtually independent. Variations in the body-cells of parents are not transmitted to their offspring. Only those variations which occur to the germ-cells are susceptible of hereditary transmission.

(b) These germ-cells are immortal in the sense that they pass by heredity from one generation to another. "A part of the germ-plasm contained in the parent egg-cell is not used up in the construction of the body of the offspring, but is reserved unchanged for the formation of the germ-cell of the following generation."[1] The germ-cell of one generation does not merely produce the body of the next generation but also the germ-cell of the latter. Descent passes from germ-cell to germ-cell. Thus, for instance, the germ-cell in any man is as old as the first human beings. This fabulous continuity of germ-cell is the ground of variations in species leading to new types.

It may be noted that Weismann's view affects Lamarck's theory much more than Darwin's, since the former rests mainly on the hypothesis of the hereditary transmission of 'acquired' characteristics. Darwin believed, like Lamarck, that the origin of new types is due to modification of body-cells. To this extent Weismann corrects Darwin. But, on the whole, Weismann's discoveries give a fresh incentive to the central theme of Darwinism.

9. De Vries : Theory of Mutations

In 1900 the Dutch scientist Hugo de Vries propounded his famous theory of mutations. After experiments with evening primrose he came to the conclusion that sometimes new varieties or species emerge suddenly from existing types. Mutation usaually means 'change', but here it means 'discontinuous variation or sudden divergence from the ancestral type.' Hugo de Vries found that the origin of a new variety or species is not necessarily due to accumulation of minute variations over long periods of time. They may apear all on a sudden.

This is obviously opposed to the general concept of heredity as well as the earlier theories of variation or gradual modification. Like produces like—this is heredity. Like produces like but not just like—this is variation. Like usually produces like but sometimes the wholly unlike—this is the contention of de Vries. Such abrupt change is by him called *mutation*; in order to distinguish it from variation.

The process of evolution is thus shown to be one of abrupt and discontinuous as well as gradual and continuous change. There is enough paleontological evidence to support de Vries' theory. "Unbroken continuity of descent", says A.H. Clark, "coupled with abrupt

discontinuity or change in bodily form is a common-striking and well-known phenomenon in all types of animal life." (His work: The New Evolution, p. 188) Clark suggests that in earliar times discontinutites were even more abrupt than now.

10. Herbert Spencer's Theory of Evolution

Herbert Spencer, an English philosopher of the 19th century, propounds a syntheitc and elaborate theory of mechanical evolution. An outline of his theory appears in his work, *First Principles*, in 1862; while its details are subsequently developed in a number of works on biology, sociology, psychology, etc. He accepts much of what was said by his predecessors, such as Darwin and Lamarck. But, unlike them, he extended the concept of evolution to all spheres of the world, and thus built up a comprehensive system of evolutionary philosophy.

Accroding to him, the whole world is a great process of evolution. Matter, motion and force are the materials of this process. They are not ultimate entities, but only the modes of an ultimate reality, an infinite absolute being whom he called the Unknowable. He defines the process of evolution as "integration of matter and concomitant dissipation of motion: during which the matter passes from an indefinite, incoherent, homogeneity to a definite, coherent, heterogeneity; and during which the retained motion undergoes a parallel transformation."[1] In brief, evolution is a combined process of integration and differentiation, which is working in cosmic, biological, psychological, and every other sphere.

In his view of the cosmic evolution, he accepts the nebular hypothesis of Lapace, and maintains that the solar system with its planets and satellites around the sun has evolved out of a nebulous state. The material particles of the nebulae with their motion and force were originally in a diffused, homogeneous and indefinite condition. As motion gradually dissipated, they became integrated into heterogenous and definite globular bodies. Thus appeared the planets and the satellites. And, then, through further integration and differentiation, the earth came to possess its diverse features, viz., land, water, mountains and oceans, and became fit for habitation.

In the biological sphere, there was first a homogeneous mass of protoplasm. Through differentiation and integration different organs of living bodies developed. Legs were differentiated for locomotion, stomach for digestion, eyes for vision, and so on. As for the origin of species, Spencer accepts his predecessors' principle of variation and modification by environment. Life, as he says, is a continuous adaptation of internal

relations to external relations.

The same principles are displayed in *social evolution*. Individuals are integrated into societies. But in the same societies, classes are differentiated by division of labour, by professional and other distinctions. Even in language and morality, there is evolution and the same principles are operative.

It may be noted that Spencer's theory of evolution, being mechanistic, is subject to the criticisms levelled against mechanism in general. Like Lamarck and Darwin, he throws little light on the ultimate cause of evolution. His theory is thus an exposition rather than an explanation of evolution. But the special charge that may be brought against him is one of agnosticism. He leaves us quite in the dark as to the ultimate reality.

His originality and importance, however, consists in making a wide application of the concept of evolution and bringing the entire world under the unity of a single formula. It is largely because of this that he stands out as a most prominent thinker of the 19th century.

CHAPTER XIII

THE TELEOLOGICAL THEORIES OF EVOLUTION

1. General Exposition

According to the teleological theories, evolution is a purposive process, and not a mere result of mechanical interaction among material elements. Teleology is opposed to mechanism or the mechanistic theories which try to explain evolution as a blind process of automatic action and reaction among physical particles. The word 'teleology' derives from the Greek word 'telos' which means 'end' or 'purpose'. The teleological theories of evolution, therefore, maintain that evolution is a gradual movement towards the realisation of some end or purpose. The world began in a simpler form; but it has been developing by gradual changes, because there is an intelligent principle working behind, which seeks to realise some purpose of its own in the entire process.

From the very earliest times, most of the philosophers have thought that the world-process is teleological. But not all of them have been evolutionists. Among those who have upheld a teleological view of evolution, Aristotle is the earliest important figure. He showed that all objects are made of both matter and form. Form is the aspect of organisation and perfection. He assumed purpose as one of the four causes of things. He called it the final cause and placed it in 'form' as one of its elements. He maintained that in the universe all changes are evolutionary, in which matter passes into form, or each thing passes from a state of more matter and less form to a state of less matter and more form. In other words, things are passing from potentiality to actuality, from less perfection to more and more of perfection. This evolutionary movement is due to the fact that God, who is pure form, absolute perfection or absolute good, is attracting things towards Him. (Vide Aristotle's *Metaphysics*)

Among the moderns, the great German idealist, G.W. Hegel, presents the most comprehensive theory of teleological evolution. For him, the ultimate reality is an Absolute Spirit, which is realising itself gradually through Nature. Reality and thought are identical, and the evolutionary

movement of the Spirit is purely logical. Matter with its mechanical principles constitutes only a stage in this process. This is a process of self-realisation on the part of the Absolute Spirit, which culminates in the artistic, religious and philosophical attainments of man.

2. Marks of Teleology in Nature

In the eyes of common sense, nature is full of marks or evidences of teleology. Purposiveness seems to be most clearly illustrated in our own thought and action. But there are also apparent marks of it in the behaviour of lower organisms or even inanimate objects. Common people accept these apparent marks as 'real'. Under the influence of tradition, particularly under a religious bias, they are fully convinced that the world is merely a means to the fulfilment of a great Divine purpose, which is active even in the simplest and minutest events in nature.

But the marks of purpose or design in nature have been recognised even by philosophers and scientists, from the very ancient times. Anaxagoras is usually said to have given a teleological explanation of the world-process, though in a very crude form. Socrates conceived the world as a machine designed by an intelligent agent, i.e., God. The teleological view assumed a systematic form in Plato and Aristotle, and passed rampantly through the Middle Ages. As to the modern thinkers, we may frame a long list of those who have recognised general purposiveness in nature, in some form or other. Mention may be made of Giordano Bruno, Leibniz, Berkeley, Fichte, Hegel, Lloyd Morgan, and indeed of all idealistic, theistic and pan-psychic thinkers in general.

In the field of science, a great many biologists (e.g. Hans Driesch and J.A. Thomson) have been convinced that the behaviour of organisms, from the highest down to the lowest, is purposive in character. The organisms live and thrive by constant adjustments to the enviornment. And all their available means are subordinated to this supreme end of adjustment. In spite of strong mechanistic trends, many great psychologists (e.g., Sigmund Freud, William McDougall, M.W. Calkins, et al.) accept the tradition of the purposive or hormic view of human and animal behaviour. Some great scientists, such as Oliver Lodge, Einstein and Jeans, have also recognised the existence of intelligent design throughout nature.

James Martineau points out that selection, combination and gradation are the marks of intelligent design, and that nature abounds in such marks, particularly in her organic sphere. For example, (a) the different limbs of a living being have been so selected that they can fit themselves with one another and adapt the organism to whatever medium it has to live in—land, water or air. Land animals have lungs, while the aquatic ones have gills for

the purpose of breathing. Camels have an extra chamber for carrying water in deserts where water is scarce; and dogs of cold areas grow a thick coating of fur to fight with the climate.

(b) Combination is evident from the 'correlation of organs or from what Darwin calls 'the correlation of growth'. During the growth or development of an organism, its different limbs are so 'combined' or tied together that one cannot change without a corresponding change in the others.

(c) In nature, things are arranged in a wonderful continuous order of gradation, 'by which a given end is attained through a train of independent means, each making provision for the next, till the series is consummated and crowned by the fulfilment' Thus, for example, life depends upon lifeless matter for its existence; and conscious life, in turn, depends upon life.

Teleologists argue that living things display certain unique characteristics which can be explained only by the principle of teleology, i.e., by supposing that they are purposive agents. The categories of matter, energy etc. are inadequate for them; we must invite some other categories, namely, life, mind, will, interest, struggle, intelligence, etc. The simple cause-effect formula must be supplemented by the more complex means-end formula for an adequate explanation of the wonderful processes of adjustment and growth of living bodies. This is even more so in the sphere of human beings. Although orthodox behaviourists have tried to reduce all behaviour to the mechanical stimulus-response principle, there have been psychologists who have strongly opposed this and have tried to demonstrate the role of purpose as central in organic nature. (cf. W. McDougall, *An Introduction to Psychology.)*

But purposivism is illustrated even in inorganic nature Not only poets and the common men, but even scientists and philosophers have been struck by the law and order that governs the world through and through. It is argued that the marvellous harmony among heavenly bodies could spring only from an intelligent design. The scientist James Jeans has gone so far as to say that the world seems to have been the work of a great mathematician. Quite recently, Prof. Henderson of Harvard University has concluded from his own studies that the earth had attained a certain 'fitness' before life appeared on it. As he says, this fitness is 'almost infinitely improbable as the result of contingency'. The properties of the elements of this fitness, such as air, water, carbon, oxygen and hydrogen in appropriate proportions, must be viewed "as in some intelligible sense a preparation for the processes of planetary evolution.....Therefore, the properties of the elements must for the present be regarded as possessing a teleological character."[1]

3. External or Internal Teleology

There is, however, a difference of opinion among the teleologists as to the nature of purposiveness. There are two ways in which purposes may be realised in the world.

Firstly, they may be imposed by an external intelligent agent. Man creates a machine according to his design and finds his own purposes fulfilled by it. Similarly, we may conceive of an eternal being of infinite wisdom like God, and say that the world with its wonderful order and harmony has been designed by Him, and is working out His own purposes. Such is the view of the ordinary laymen, of most of the traditional religions, and also of the 17th century Deistic thinkers, such as John Toland, Matthew Tindal, Holbach, etc. This is knwon as the theory of external teleology or tanscendent finality.

Secondly, the purposes may be imposed upon the world by itself. That is, the designing intelligence may be immanent in the world. The processes of the world will then be the self-manifestations of that universal intelligence or universal mind, intended as means to the realisation of the purposes of that mind. Evolution will then mean the self-evolution of that intelligent agent, in which the different stages of the evolutionary movement are only graded levels of progress attained thereby. Such is the view of the pantheistic, semi-pantheistic or panentheistic philosophers, such as Aristotle, Fichte, Schelling and Hegel. In earlier times this universal mind has somethimes been called the World-Soul; but it is often called the Absolute Spirit or simply God. So conceived, the world is comparable to a conscious organism (as ordinarily understood) which, having a spontaneous growth, moves from its own native drives, and directs its functions towards the satisfaction of its own biological ends. This is the theory of internal teleology or immanent finality.

Of these two views, the latter is much more common in the philosophical and scientific circles. The theory of external teleology is attacked on the following grounds. First of all, it is obviously too anthropomorphic. It seems childish to conceive the relation between the world and its designing and guiding agent (i.e.God) as analogous to the one between a finite human artificer and his work. Secondly, this theory imposes limitation or finitude both on God and the world. But finitude is usually taken to be contradictory of the very notion of divine nature. Thirdly, this renders the relation between God and the world loose and arbitrary. If God is external to the world, neither is necessarily in need of the other. It is not therefore understood why God should create or impose His own designs on the world. But in immanent finality, God and the world are inseparably and

essentially related. God requires the medium of the world in order to realise His infinite potentialities, and the world derives its being and significance from the living presence of God within it.*

Whether teleology is a valid theory is iteself a question, which is quite difficult to solve. But it seems obvious that it can be accepted only in its immanent form. If teleology is away from the general scientific attitude, transcendent teleology is still further away.

4. Criticism of the Mechanical and the Teleological Theories of the World

Apparently, mechanism and teleology have equal strength and weakness. Mechanism seems to be true of the inanimate world, while teleology of the animate. It appears that the movement of a stone thrown upward is absolutely governed by the mechanical laws of gravitation. On the other hand, living beings, or men in particular, usually act for the realisation of some end. This dualism seems to apply as well to the problem of evolution. There are very strong grounds for the belief that life and mind have evolved out of matter; and because matter behaves mechanically, it follows that life and mind will also behave in the same manner. But, on the other hand, it is difficult to say why the world should evolve at all unless there is some end which it is somehow meant to fulfil. It is because of this double-faced nature of the world that it is not easy to take a decision. In fact, of these two theories, the strength of one is the weakness of the other; both have had their followers and opponents and there have also been attempts to get them harmonised.

(1) Mechanism seems to have the great merit of removing the prejudice of supernaturalism which is obviously a great bar against logical explanation and scientific progress. It is also right in opposing unrestricted anthropomorphism and the notion of external finality. It is doubtful that the lower organisms are purposive in the sense that, like men, they (always or ever) consciously anticipate their ends, or that the inanimate objects have any ends of their own.** Again, it seems odd to suppose that the world is serving the purposes of God who has designed it and is guiding it 'from intside.'

(2) But mechanism has been attacked at more than one point. It is alleged that mechanism fails to account for certain unique features of life and mind. A living body has a unity and harmony and displays complex modes of struggle and adaptation which annot possibly be explained by fortuitous combination of physical particles. Man's intellectual, moral, aesthetic and religious experiences and aspirations, which are thoroughly saturated with a consciousness of *value*, cannot be explained on a

* See also the theories of relation between God and the world.

** 'It seems absurd to say of the egg which is placed in a saucepan of hot water that it is striving to achieve the condition of being hard-boiled, or of the assemblage of the scattered parts of a car in a Ford factory that each, as it is fitted into its appointed place, is seeking to fulfil the end of the complete or perfected car.' (Joad, *Guide to Philosophy*, p.200)

mechanistic basis. "It is not easy to believe," for example, "that the good man's sense of obligation is entirely a by-product of his nervous system and that the whole world of man's ideal aspirations is a function of the state of his body."[1] It seems absurd to suppose that the marvellous poetic works of Tagore or Shelley are only a chance occurrence and a result of mechanical interaction of atoms.

(3) Mechanism seems to be self-contradictory. As C. E. M. Joad points out, "if mechanical causation can be correctly invoked to explain the workings of mind, it cannot be coerect to say that it can."[2] The mechanist summons his (mechanistic) hypothesis for the 'purpose' of explanation, and thus he is himself a teleologist.

(4) Mechanism is alleged to give only one aspect of the causal relation. The cause A always produces the effect B. But why should A (i) at all produce B, and (ii) B only, not C or D? We can answer this question by supposing that there is an end which determines this particular cause to produce this particular effect. This is the other aspect of the causal relation which mechanism fails to recognise.

Causality being a combination of these two aspects, mechanism and teleology become synthesized. It may be supposed that the universe is moving towards an end, and the causal series is a 'means' to that end. Careful observation has shown to many great scientists (e.g., K.E.von Baer and Prof. Haldane) that the earth acquired a certain 'fitness' for the evolution of life. Mind is purposive and aspires after certain great ideals. But mind is dependent on life, life on the vegetable kingdom; and this, again, is dependent on certain peculiar qualities of the earth's crust. In this way the entire solar system, and probably the entire universe, is summoned as necessary means to the evolution of mind.

(5) But this synthesis of mechanism and teleology entails that the world is both material and spiritual, or externally material but internally spiritual. In fact, this is the view of many renowned philosophers, such as Descartes, Spinoza, Locke, Leibniz and Hegel. It is deemed illogical to divide the world into two spheres, one mechanical and the other teleological. Hence it has been suggested by many that the world is a physical structure governed by causality; but it is also the manifestation of an immanent spirit which realises its own ends through the mechanism of the world. It may be wrong to suppose that the spirit is capable of 'conscious design' from the very beginning of its evolutionary journey. But it is essentially pregnant with a 'purposive impulse', which develops into 'conscious design' only at the level of mind.

CHAPTER XIV

CREATIVE AND EMERGENT THEORIES OF EVOLUTION

1. The Theory of Creative Evolution

Henri Bergson, the French philosopher, in a work published in 1928 presents a novel theory of evolution, known as the 'Theory of Creative Evolution'. On the one hand, rejecting materialism, he maintains that the ultimate reality is change or life or pure duration, which he calls the *elan vital* or the vital surge. On the other, he argues that both mechanism and teleology are deterministic and therefore faulty. The vital surge of the world is out and out a process of ceaseless change, which is not only evolutionary but *creative*. In mechanism the past determines the present and the future; while in teleology the future determines the present and the past. Hence in both, says Bergson, "all is given", and no scope is left for the appearance of anything truly new. If the world were either mechanistic or teleological, a superhuman intellect or an omniscient mind would be able to view the past, present and future at a glance.

Mechanism and teleology are but the ways in which our intellect looks at the world-process. But our intellect is unable to see things in their real nature. *Intuition* is the appropriate faculty of knowledge. And if we see through intuition we shall be able to perceive that the vital surge of reality is constantly evolving and continually producing new species of beings. In his work, *Creative Evolution*, he criticises the modern theories of evolution propounded by Lamarck, Darwin, Weismann and others, and finds them unsatisfactory as they lack the original common impetus of life as the real ground of evolution. The vital surge proceeds like a "shell which suddenly bursts into fragments which fragments, being themselves shells, burst again, and so on" (*Ibid.* p,.103). It is undetermined or free and has advanced in numberless directions. But it is only in the directions of plants, animals and men that it has evolved with success. In many directions the evolving impulse has failed or is turned backwards. Thus evolution does not always mean progress; sometimes it means regress as well.

This theory is known as creative, because it is the direct antithesis of the repetitive conception of the mechanists. According to mechanism, when a new category or species evolves, it is only a repetition of the preceding one, though in a more complex form. But Bergson maintains that it is altogether new, and that there is an unbridged gulf between it and its predecessor. When, for example, mind evolves out of life, mind is essentially different from bare life and is irreducible to it. The word 'creation' distinguishes his position, on the one hand, from mechanism and, on the other, from the theory of emergent evolution propounded by Lloyd Morgan and Samuel Alexander. The evolved category is not a 'resultant' (mechanism), nor an 'emergent', but a creation.

2. Emergent Evolution

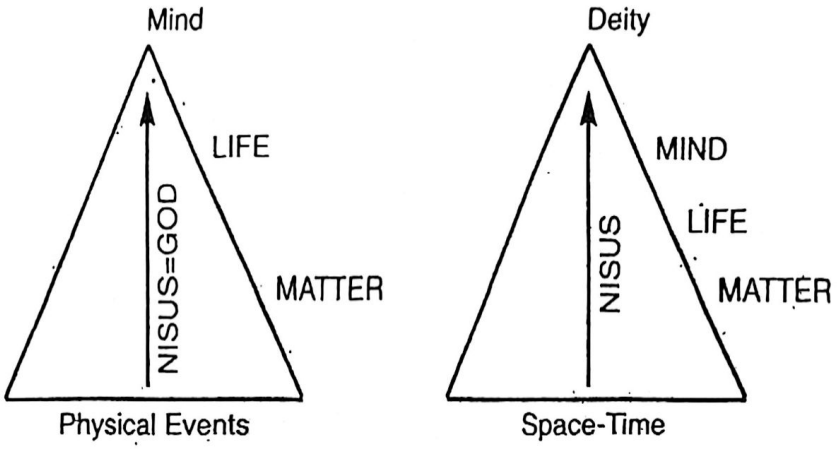
The theory of emergent evolution has been presented by Lloyd Morgan and Samuel Alexander of Great Britain. Morgan borrowed the word 'emergence' from G.H. Lewes (1817-1878), and popularised the concept of emergence through his Gifford Lectures delivered in 1922. His book, *Emergent Evolution*, appeared in the next year. Alexander built up a comprehensive evolutionary world-veiw in his work, *Space, Time and Deity*, published in 1920. Their views are substantially the same, though there are certain points of difference.

According to them, evolution is a continuous process of progressive change, in which at certain stages new qualities or categories of being appear out of the preceding stages. These new categories are called 'emergents.' They are not 'resultants', as mechanism would suppose, because they contain something new and are not a mere repetition of the preceding category in a more complex form. They are not 'creations', as Henry Bergson would say, because they are reducible to the elements of the preceding category. What happens is that the same elements come to have a new 'relatedness' or organisation, as a result of which new qualities or new laws of behaviour emerge. It is a case of supervention, of coming out of the new from the old. For example, when life emerges out of matter, it is new inasmuch as the essential characteristics of a living being are wanting in a nonliving body. But the ingredients of a living being are material, and it can be fully analysed into material particles.

But what are the basic elements of the wrold, and why should they evolve? Here the answers of the two philosophers differ. The basic elements are, according to Morgan, physical events or 'a swarm of atoms'; while, according to Alexander, they are point-instants, i.e., the ingredients of space and time combined. Both maintain that, in the ultimate

ingredients there is a nisus or directive impulse to evolve. Morgan denominates this nisus as God.* They both represent the evolutionary progression by the diagram of a pyramid.

1. Morgan **2. Alexander**



The progressive movement, either from or through matter, passes to the higher category of life, and from life it passes on to mind. But while, in Morgan's view, the process stops at mind, according to Alexander, there is next to mind a further category to evolve. This category is called by him Deity or God. But there are still higher categories to follow, one after another, and there is no stop to the process. Thus while Morgan places God at the beginning of evolution, Alexander regards God as an emergent from the space-time matrix.

3. Criticism of the theories of Creative and Emergent evolution

(a) The great merit of these theories is that; unlike mechanism, they can afford a justification for our belief in the dignity of our existence and the objectivity of our values. They also grant the biological science a more or less independent status. But both of these theories have certain limitations. The notion of 'creation' is questionable insofar as it involves freedom in the extreme sense in which Bergson takes it. The real must be rational and therefore determined by certain laws. Otherwise the higher categories, such as life and mind, become purely a matter of chance and to that extent lose their dignity and significance.

(b) The emergent view, on the other hand, seems mistaken insofar as it affirms that the higher can be reduced to the elements of the lower without any residue. It appears truer to say that, although the higher emerges out of the elements of the lower, once it emerges, it comes to posses an irreducible surplus. Qualitative distinctions may and do arise from quantitative differences; but they are not on that account reducible to the latter. Such reduction obviously implies mechanism or repetition.

(c) On the whole, the theory of emergence seems to fare better than its ally. It is closer to scientific trends and is indeed more widely appreciated. But the metaphysical aspects of the views of Bergson and Alexander seem to be peculiarly mystical. It is difficult to realise how bare change or bare space-time can be the stuff of the reality. Morgan's position is in that respect more agreeable to common sense.

(d) But the real importance of the concept of emergence is said to consist in providing a stronghold against materialistic mechanism, without yielding to the unconvincing dogma of special creation. By synthesizing novelty and continuity, it establishes the unity of the world without relinquishing the significant distinctions among kinds of things. It is as if a magical key to a hundred thousand secrets and mysteries of the universe. (cf. Patrick). It affords a great meeting ground of materialism and idealism, of mechanism and teleology, of man's physical needs and spiritual aspirations. With due modifications (as suggested) it may well serve as a working hypothesis in both theory and practice, until a better hypothesis is offered or its possibility demonstrated.

NOTE

Can quality come out of quantity? The kernel of the concept of emergence is the belief that real qualitative differences can arise out of quantitative differences. If this possibility is doubted, emergence collapses and we have either bare repetition or miracle. The qualitative and the quantitative features of things are believed to be not only different but opposed. The qualitative features of a lump of sugar, for example, are its materiality, hardness, whiteness, sweetness etc., while its quantitative features are its size, the number of its constituent particles, and so forth. The general conception is that these two types of features are mutually irreducible. That is to say, the former cannot come out of the latter and vice versa. But is that really the case?

Science has shown that the basic differences between kinds of things are realy quantitative. Atoms of the fundamental elements, such as hydrogen, oxygen and carbon, differ simply in respect of the number and arrangement of their electronic components. Different colours are due to various rays of light differing only in wave-length and frequency. All these clearly suggest that qualitative differences can have a purely quantitative basis. If we attach any value to the validity of experience, we are not entitled to say that these qualitative differences—i.e., differences between

red and blue. sweet and sour, or hot and cold—are absolutely illusory. (If I am not allowed to assert a qualitative difference between my brain which can think and my pen which does not, I do not know what qualitative difference can possibly mean. Qualitative or quantitative, it seems enough that my brain 'differs' from my pen in the way it does).

We may cite some simpler examples or analyse some very ordinary facts of experience to show how quality can arise out of quantity. We have an angle or a cross (< or +) according as we put two lines in two different ways. Two straight lines never make a figure, but we may have a figure just as we pass from two lines to three. This change is purely numerical and configurational, but the consequence is tremendous. Again, if a man takes one or two sleeping pills he may have a sound sleep, but if instead he takes twenty his sleep is likely to be everlasting. The atomic numbers of nitrogen and oxygen are, respectively,7 and 8; it is a little numerical difference; but, as we all know, these two elements behave in quite different ways.

In a word, quality and quantity seem always to go together; rather they appear to be inseparable aspects of the same fact and mutually reducible. Hence it seems quite possible to conceive that great qualitative variations of the world have emerged from variations in its ultimate elements only in respect of their number and organisation. Just as we can have two different pictures from two different quantities of the same ink spread differently on two different sheets of the same type of paper, so also the great variety of things may be considered to have arisen from the same stuff simply through quantitative and configurational variations.

In Hegelian and Marxist dialectics we have the concepts of 'measure', 'nodal line' and 'leap' and also the law of the transition of quantitative to qualitative changes. A stock example of this transition is that normal water starts boiling as soon as the quantity of heat applied to it exceeds a specific limit. *Measure* is the limit beyond which quantitative changes entail a qualitative change. To take another example, the passage from capitalism to socialism is a passage from one social system to another which is qualitatively different; but this qualitative difference is actually due to quantitative changes in the material conditions of economic production.

Emergence, thus understood, is really something curious. But this is a description of what actually happens and is not sheer guess-work, and one could wonder why it happens or how it compares with divine creativity.

PART V

ONTOLOGY OR METAPHYSICS

CHAPTER XV

TYPES OF ONTOLOGICAL THEORIES

1. Classification of Ontological Theories

Ontology, as we have seen, is an inquiry about the essence of reality, of the nature and number of the ultimate stuff of the world. By the ultimate stuff is meant the basic substance or element, to which everything is reducible, but which itself is not further reducible. It may or may not be different from the ordinary variety of things. If different, we have a contrast between what is known and what it is in itself. This is the great antithesis between phenomenon or *appearance* and noumenon or *reality*. This antithesis is as old as philosophy, and must be, because philosophy is essentially an attempt to distinguish reality from appearance. Of course, philosophy cannot start with the assumpiton that the antithesis is actually there. Rather, its purpose is to see whether it is there; and, if there, to see, further, how reality differs from its appearance.

Such is the problem of the ultimate stuff. If asks: Is not all that we know in ordinary experience real? If not, what is the precise nature of the real, and how are its appearances or manifestations related to it?

Evidently, this question of essence or ultimate stuff has two complementary aspects. It is either about (a) the nature or 'kind' of the ultimate stuff, or about (b) its number. We may call them, respectively, the qualitative and the quantitative aspect of the question. It is obvious that each aspect is capable of more than one answer. Reality may be one, two or more both in kind and number. Accordingly, (i) we may have three different answers corresponding to each aspect, (ii) answers of one aspect may be variously combined with those of the other, and (iii) there may be variations even within the answers to one aspect. This is also historically the case and as such we have a fairly long list of ontological theories.

The three answers corresponding to each aspect are called monism, dualism and pluralism.* According to monism, the ultimate stuff of the

* The word 'monism' is from the Greek 'monos' (alone); 'dualism' is from the Latin 'dualis' (duo=two); 'pluralism' from the Latin 'pluris' (more).

world is one, either in kind or in number or both. When it is one in kind only, we have (what may be called) 'qualitative monism'; when in number only, we have 'quantitative' monism; when in both, the position may be called 'perfect' or 'absolute' monism. Similarly with dualism and pluralism.[1] Thus a theory may be monistic from both standpoints, e.g., the position of Parmenides (514 B.C.) or Spinoza; or pluralistic from both standpoints, e.g., the position of Empedocles or the pragmatists. But, again, a theory may be monistic from the qualitative standpoint, but quantitatively pluralistic, e.g., the theory of Leibniz and Berkeley. Or again, a theory may be qualitatively dualistic, but pluralistic from the quantitative standpoint, e.g., the position of Descartes and Locke.

Readers are, therefore, likely to be confused by the classification of these theories, and may be saved only if they clearly remember the two standpoints. Our next task will be to explain the most important of the ontological theories without classifying them too strictly, which is neither indispensable, nor possible without inviting unnecessary prolixity.

2. Monism[2]

Monism (as we have just seen) is the theory of reality according to which the ultimate stuff of reality is one. When it is one in kind only, we have qualitative monism. According to it, all apparently different kinds of things are really made of one and the same kind of stuff. But the world is not therefore a 'single' entity, and the multiplicity that we experience is not a sheer appearance. We, however, find in ordinary experience three basic kinds of stuff—matter, life and mind. The monist may (a) take any one or none of them as the ultimate kind, and (b) either explain the others away or derive them from this ultimate kind. This has also actually been the case. The monisms according to which matter, life or mind is the ultimate stuff have been called materialism, vitalism and idealism (or spiritualism) respectively. But the monism, according to which the ultimate stuff is neither of these but something still more ultimate, has been called neutralism or neutral monism.

Materialism has been upheld, for example, by the early Greek philosophers, and idealism by Leibniz and Berkeley. Vitalism has been upheld, of late, by the French thinker Henri Bergson. Mention may be made of Spinoza as a typical advocate of neutralism, deducing both matter and mind from the higher principle of 'substance'.

When, however, the ultimate stuff is one in both kind and number, we have perfect monism, also called 'singularism.' On the one hand, this theory tries to reduce different kinds of things to a single ultimate kind; on

the other, it seeks to show that the numberless particulars are virtually the manifestations of one singular entity. Each thing exists not by itself but as part and parcel of a single universal reality. The absolute idealist, for example, maintains that the world is ultimately spiritual in character. Matter is an appearance or creation of the spirit, and things exist only as parts of a single absolute whole.

But all these theories have great variations even within themselves. Thus, for example, under the head of materialism we have the older atomistic theory of the Greek atomists or the four-elements theory of the *Carvaka* system, and also the modern electronic theory. On the other hand, idealism divides itself into its subjective and objective types, or objective idealism into panentheistic or panpsychic forms. But they have one element in common, viz., unity or 'singleness'. The essence of monism consists in discovering unity and harmony among the apparently diverse and numberless particulars.

3. Dualism

In the strict ontological sense, dualism is the theory, according to which the world is made of two fundamental kinds of stuff, viz., matter and mind. These two are endowed with opposite characteristics, and are irreducible to each other. The body is spatial, extended, inert, incapable of thought and will; while the mind is purely temporal, essentially active and capable of thought and will. Dualism is the usual view upheld by common sense, even from very old times. It characterises the philosophy of all periods. There are dualistic elements in Greek philosophy. Dualism assumes a more definite shape and a wider range in the middle ages. But it finds a very clear and strong advocacy in Descartes and his followers at the very beginning of the modern period.

In his epoch-making writings, particularly in his *Meditations on the First Philosophy* (1641), Descartes distinguishes between matter and mind as two ultimate realities or 'substances'. The essence of matter is extension and that of mind is thought. The whole physical world is made of matter, governed absolutely by mechanical laws of motion. He rejects the Aristotelian belief in 'entelechy' and opposes vitalism, asserting that even lower animals are thoroughly material or pure mechanisms. But we, human beings, have both a body and a soul. Our body is part of the corporeal world and, like the animal bodies, mechanical. But the soul is purely a thinking agent, having purpose, choice and freedom of action.

Body and mind are diametrically opposed. The body is figurable and movable, mind is not; the body cannot think, and the mind is not extended.

Unlike a monist, Descartes thinks it inconceivable to derive mind from body or body from mind. But matter and mind can affect each other. In the case of each individual man, this interraction occurs in his pineal gland. Descartes is, however, a believer in God, and distinguishes between God as the only absolute substance and matter and mind as two *relative* substances created by Him. But his original 'dualism' is not thereby affected, because God is Himself spiritual.

The dualism of Descartes is supported by his immediate successors known as the 'Occasionalists' (See ch. XIX) such as Geulincx and Malebranche. But the other great dualist of the modern period is John Locke, the founder of British empiricism. While Descartes deduces his dualism from rationalistic premises, Locke arrives at a similar position from an opposite empirical standpoint. He argues that knowledge is composed of two kinds of ideas—the ideas of sensation and the ideas of reflection. These ideas are representations of simple qualities. We find some ideas always going together, which is not possible unless there is some underlying support or substratum. Hence we must accept the existence of two types of substances, material and mental, corresponding to the two kinds of ideas. At the same time, however, we have to acknowledge the existence of God as the eternal and omnipotent cause of all that exists, since otherwise we cannot explain the origin, harmony and beauty of the world.

But, apart from this strict sense, 'dualism' may be taken in a wider sense to indicate dualistic features of thought, of whatever nature. Dualism will then be discovered in a far larger number of thinkers. Mention may be made of Expedocles' principles of *Love* and *Hate*, of Plato's sensible and intelligible worlds, of Aristotle's matter and form, of Kant's phenomenon vs. noumenon, the 'purusa' and 'prakrti' of the Indian Sankhya system, and so on. The essence of dualism, in any form, is the ultimacy of the dichotomy or irreducibility of the spheres or categories into which the reality is divided.

4. Pluralism

According to pluralism, the ultimate stuff of reality is more than two or 'many', either in kind or in number, or in both. When it is so in number only we have quantitative pluralism (e.g., Leibniz). When it is so both in kind and number, the position may be called *perfect* or *absolute* pluralism (e.g. William James).* But even under these two broad categories, there

* Different 'possible' types of pluralism have been considered above in Sec. I. The 'qualititative' type is not known to have been explicitly maintained by any thinker, although it is loosely and vaguely implied in all popular as well as philosophical conceptions, insofar as nobody denies that 'there is only one world.'

are a great many major or minor variations. For example, we have materialistic or spiritualistic pluralism, according as the ultimate stuff is regarded as wholly material or spiritual.

Thrughout the long list of pluralistic systems, however, one thing is essential and common. Negatively, the pluralists enjoin a check on the monistic impulse of reducing all kinds of things to one ultimate stuff Positively, they emphasise the world's apparent features of variety and individuality. Of course, no pluralists deny that there is a certain cosmic unity among the varying particulars. But they give more importance to the aspects of variety and regard them as all the more real. As it is sometimes said, while monism derives plurality from unity, pluralism derives unity from plurality. In monism the whole is prior; parts are within and for the sake of the whole, having no reality apart from the latter. In pluralism, the parts are prior; they are relatively independent and themselves 'constitute' the whole.

5. The Older Pluralism

Pluralism appears in different forms even in the early periods of human thought. In India, for exmaple, it apears in the nine-substance theory of the *Vaisesika* system and the four-element conception of the *Carvaka* materialists. In Greece, Empedocles offers the first system of materialistic pluralism. He says that the world is made of four ultimate elements, viz., earth, air, water and fire. All different kinds of things are but the mixtures, in various proportions, of these four ultimates. The Greek atomists, headed by Democritus, conceive of the world as made of eternal atoms. They are monists from the qualitative standpoint But they are pluralists, insofar as the atoms are numberless, separate, and possessed of a kind of individuality determined by their size and shape. Others on the same list are Anaxagoras and the Epicurians. Traditional scientific materialism has been pluralistic. For a long time, until the advent of the electronic theory of matter, scientists have believed in as many as ninety-two etementary substances, such as hydrozen, oxygen, nitrogen, etc.

On the spiritualistic side, Berkeley and Leibniz present two remarkable systems of pluralism. According to Berkeley, the existence of matter or any extra-mental object is impossible. The world, in fact, consists only of the divine spirit or God, and the finite or human spirits, with their ideas and perceptions. Leibniz's theory is known as *monadism*. He conceives of the world as an aggregate of an infinite number of spiritual atoms, which he calls 'monads' The monads are essentially distinct, no two of them being alike, and are mutually independent. Being

'windowless they are self-enclosed and cannot affect one another. Leibniz thus reduces the world to an unlimited plurality of ultimates, and upholds a positon which is 'individualistic and pluralistic'.*

Apart from this strict sense, we have marks of some loose types of pluralism in many other systems. In the modern period, however, pluralism receives a prolonged set-back at the hands of the German idealists in the 19th century. It is only recently that it has reappeared particularly in the writings of the pragmatists and the neo-realists.

6. Modern Pluralism : the Pragmatists

The pragmatic theory of pluralism has been most elaborately presented by William James, the most celebrated among the pragmatists. The pragmatists, in general, attack monisms of all types, particularly the absolutistic type of Hegel and his followers. They reject the coherence theory of the idealists, and advocate a distinct method (the pragmatic method) of testing the truth of propositions. James denounces Hegel's Absolute as a product of barren abstractionism. It is an utter void—"a night in which all cows are black". Absolutism wrongly takes us away from the reality mainfest in experience and deprives us of our individuality and freedom, and renders our struggle for ideals theoretically impossible.

Consistently with their empiricism and pragmatic method, the pragmatists uphold an ontology closely akin to the sense-data metaphysics of some modern realists. The real is made of the direct objects of experience—of the *sensa*, such as hardness, softness, redness, warmth, etc. In itself, it is an undetermined or ambiguous stuff. But it becomes determined and appears in its fullness and variety as man perceives it according to his purpose.** Things are only such sensuous stuff, the perceptual flux, the immediate data of experience. No doubt they are inter-connected and constitute a chain of events affecting one another. In the words of James, reality is of a 'strung-along type'. But things are not so connected as to constitute a closed system. Each object is composed of parts; 'every smallest bit of experience is a *multimum in parvo* plurally related'.[3] There is "some separation among things, some tremor of independence, some free play of parts of one another, some real novelty or

* But Leibniz also speaks of God as the highest of monads, who binds all monads together by a universal law of harmony (known as the law of pre-established harmony). And hence his theory, in a sense, admits of a monistic interpretation as well.

** This position assumes in F.H.Schiller the name 'humanism.' (Cf. His *Studies in Humanism.)* As James puts it: "We receive in short the block of marble, but we carve the statue ourselves". The *that* of reality "is its own; but the *what* depends on the *which*; and the which depends on us". *(Pragmatism)*

chance, however minute."[4]

Of course, the pragmatist admits that the world may be regarded as one, insofar as things are connected. But the emphasis is laid on the aspect of plurality. The particulars are the primary facts; the part is prior, and the whole is only a 'being of the second order'. Pragmatic philosophy is thus ultimately pluralistic.[5]

7. Modern Pluralism : The New Realists

The realists of the modern times, known as 'new realists' or 'critical realists,' present a pluralistic view which is both qualitative and quantitative. On the one hand, the new realists are epistemological monists, identifying the objects perceived with objects as such. They strongly oppose subjectivism and assert the reality of the external objects. On the other, some of them (e.g., Samuel Alexander) are great exponents of the theory of emergence and maintain that the different types of beings, such as matter, life and mind, are all real with their specific distinctions. The higher among them cannot be reduced to the lower in the sense that the former is 'simply' a more complex form of the latter.† Hence, the realists reject gross materialism and assert that life and mind are as real as matter, possessing unique qualities of their own.

But they even go further and say that the 'real' world contains other constituents in addition to these. Such things as the principles of reason, numbers, space and time, relations and values are also real; they exist as independently of mind as the physical and mental objects. But since they do not process a concrete form like tables and chairs, we may distinguish them from the latter. We may call the former 'subsistents' and the latter 'existents'. Even God is in a sense real—in the sense that He is the 'totality of values', or the eternal or never-ending urge towards the evolution of the higher.

The critical realists considerably differ from the new realists, but they equally oppose the absolutistic monism of the Hegelians.

The realistic pluralism is greatly strengthened by the realists' notion of relations, which forms rather the more important part of their doctrine. Relations (at least some), according to the realists, are *external* and not internal as the idealists suppose. Terms of no relations are modified by them; the former are prior to and independent of the latter. Particular things have relations; but they may exist without having any *fixed* relations, and may have in fact an indefinite variety of relations.

† This pluralism is, of course, of a relative nature as will be evident from what follows. See Sec. 10.

The world is a whole in which particular things are parts. But just as the whole can exist without relation to any particular parts, so the parts too can exist without 'necessary' relations to any particular whole and may have various relations among themselves. The world is thus a plural structure, in which particulars enjoy a relative independence and individuality.

8. Criticism of Monism, Dualism and Pluralism

It is obvious that dualism and pluralism enjoy the special advantage of being in close harmony with the common-sense view. Common sense seems to bring things first under two broad heads, viz., physical and mental, and then divides the physical things into various observable classes.

(1) The world is ordinarily looked upon as an aggregate of independent particulars. On the whole, dualism appears to be closer to common sense. The general religious conception is also dualistic. But conformity with common sense or religion is itself of no scientific merit. It has great practical value only when the truth as such seems unknown or unkownable. Rather science is, in numberless ways, a rejection of or departure from common sense. Hence, monism deserves no criticism merely because it is evidently opposed to common sense.

(2) Monism is undoubtedly the general impulse in the mind of the scientist or the philosopher. Both love to find as much unity among apparent diversities as possible. But again, monism is not justified simply because it is a general impulse. In fact, the logical value of any one of these theories consists solely in its ability to explain all things. In that respect, the responsibility of monism appears to be the heaviest. But even here the issue is two-sided, and advanage and disavantage fall inversely to the lot of these theories.

On the one hand, the monist's task is most difficult, because he has to bring innumerable apparently diverse types under a 'single' highest category. The dualist and the pluralist are obviously in a more advantageous position in this regard. But, on the other hand, they have to face, unlike the monist, the great ordeal of connecting things which are assumed to be many and essentially different.

(3) For example, the dualist has to explain how matter and mind are related. The dualism of matter and mind being granted, there is no denying that they are related, which is illustrated so brilliantly in man. Descrates himself not only recognised their inter-relation but even their inter-'action', and tried to explain it by the pineal gland (See Ch.XVIII). But his

explanation as well as those advanced by others is not accepted by all and is not indeed easy to accept. The general historical tendency is monistic, and the general contemporary trend is split between monism and pluralism. But the difficulty which afflicts dualism is naturally faced all the more by pluralism. Even the Cartesian notion of 'substance' as an independent and permanent something has lost favour with the moderns. Matter has been replaced by energy or physical event, and mind by process or behaviour.

(4) It is obvious that the older forms of pluralism are crude and do not stand criticism. But even its modern forms are open to attack. Setting dualism aside, we have the acuter and clearer antithesis between monism and pluralism. And naturally, the merits and demerits or the advantages and disadvantages of the one inversely affect the other. The qualitative pluralism of the evolutionists like Morgan and Alexander is only relative; since they presuppose one ultimate stuff underlying the variety of reals such as matter, life nad mind. It stands or falls according as their concept of emergence or creative synthesis does or does not effectively counteract the reductive analysis of the monists.

On the quantitative side, pluralism rests upon the concept of the externality of relations. The monists' notion of internality (of relations) guarantees a unified view of the world. Thereby it subscribes to the traditional conception of the world as an organised structure governed through-and-through by laws. But it finds it difficult to account for freedom, and sometimes even rejects it for the sake of consistency (e.g., Spinoza). Pluralism is, in that respect, in an advantageous position, and may draw inspiration from quantum physics. The externality of relations has also been shown to be (e.g.by Pitkin) supported by biological facts. But it makes the world a loose structure, and cannot do full justice to the law of causality, and interdependence of phenomena so evident to our experience. It is probably this realisation that led Leibniz to modify his pluralism by the introduction of God as the 'monad of all monads' who creates the other monads and holds them in unity by 'pre-established' harmony.

(5) The position of the pragmatist seems even worse than this. The pragmatists are avowed lovers of life, i.e., human life. By a single stroke of pluralism based upon 'radical empiricism', the pragmatist can defend freedom and the higher values, including even God, and solve the problem of evil. The pragmatism of William James "has a spicy, stimulating flavour, whetting one's appetite for something more. But all we get is more of the same kind and in the end we feel that something is lacking. It is

because of the mind's insistent demand for a unified world view that one feels a trifle impatient with the author of *The Pluralistic Universe* for not telling us something more definite about this perceptual flux."[6] In short, accepting the facts of experience is only having the ontological problem and not solving it. The most agreeable view seems to be a careful synthesis of these divergent theories—of monism, dualism and pluralism. (Vide—Conclusion of Chap. XVII)

9. Vitalism

[We now pass on to the ontological theories viewed from the qualitative standpoint, viz., materialism, idealism, vitalism and neutralism. But since materialism and idealism will be dealt with in separate chapters, we shall be concerned here only with vitalism and neutralism.]

According to vitalism, the ultimate stuff of the world is neither matter nor mind, but life or vitality. The great French philosopher, Henri Bergson, upholds a position which may be called vitalistic. He finds fault with both materialism and idealism. Matter, he says, is the opposite of reality. Nor is reality any substance, either material or mental. In fact, the essence of reality is *change*. This change is not a property of reality—not even its essential property, as Heracleitus supposed. It is rather the reality itself.[7] The world is a pure and ceaseless flow of 'becoming' in which there is no 'thing' which becomes.

Change so conceived is identified by Bergson with pure time which he calls duration (duree). The time of our ordinary perception is characterised by a division into past, present and future. Such time is not the real time. It is a product of our intellect which naturally falsifies things.* Such time is useful in our work-a-day life. But real time is above such divisions. It is not a succession of instants, but a constant flow. "Duration," in the words of Bergson, "is the continuous progress of the past which gnaws into the future and which swells as it advances."[8] We have an immediate apprehension of such time in our consciousness by the faculty of intuition. While intellect is the faculty of action, intuition alone gives us knowledge.

The real, according to Bergson, is evolving in a free, creative manner. It is throughout charged with an 'elan vital' or vital urge which is originally undifferentiated but gradually differentiates itself into ever new forms. This elan vital is no other than duration or pure time. Hence, in fine, we have a complete identity of reality, change, duration and the elan vital.

10. Comments

(1) Bergson is not only an eniment philosopher, but also a great biologist and a famous literary man. Marks of this multi-coloured

* See Chapter VI : Bergson s theory of Knowledge.

personality are vivid in his philosophical thought. His vitalistic hypothesis dervies from his association with biology, and his style of presentation is rather perversely affected by his literary genius. As a result, his thought culminates in something that may be called a sort of mysticism which seems to stand on choice as well as reason. Russell goes so far as to say that Bergson as a rule does not give reasons for his opinions, but relies on their inherent attractiveness and on the charm of an excellent style.[9]

(2) In so far as time is identified with reality, his position may be called temporalism. But it is difficult to understand how reality could be made of pure time, bare change or pure vitality. Common sense cannot conceive the world except as 'something' which is in time, which changes, or which is possessed of vitality. Bergson condemns intellect as a faculty of separation and abstraction. But his own system seems to be an excess of abstractionism.

(3) Apart from this, Bergson's vitalism seems to enjoy a great advantage over materialism and idealism. Life being mid-way between matter and mind, it is easier to bring matter and mind under this category than to reduce matter to mind or mind to matter. Modern physics has rendered inert matter into dynamic energy, while modern psychology has shown the inseparable connection between thougtht and physiological processes. The older conception of matter and mind as fundamentally different is giving way. Bergson's vitalistic hypothesis is thus in harmony with the up-to-date scientific trends. But no science will probably accept the extreme sort of abstractness that he ascribes to his elan vital.

(4) Bergson's philosophy is closely allied to pragmatic and similar other humanistic trends. His *elan vital*, being free and creative, provides scope for man's freedom, man's creative and progressive activity. To that extent his philosophy has great practical value and has in fact exercised great influence. It is monistic, in so far as the elan vital is a single vital surge. It is pluralistic in so far as the elan vital differentiates itself into numberless different forms. But dualistic elements are also visible in it. He often speaks of matter in such a manner as to make it a reality co-eternal with life, so that the world-process turns out to be a 'clash and conflict of two opposite motions: life, which climbs upward, and matter, which falls downward'.

11. Neutralism

As we have already seen, according to neutralism the stuff of reality is neither matter nor life or mind, but some neutral stuff which is different from each of them. This stuff has been given different names—substance,

space-time, and so on. Sometimes, it has not been named at all, but regarded as the unknown or the unknownable. Spinoza is a typical exponent of this doctrine.[10] His system which appears in his famous work, *Ethics* (1677), is founded upon the notion of substance. As a typical rationalist (a spider-philosopher), Spinoza deduces his entire system from the definition of substance. He takes this notion from Descartes, but makes a more consistent and elaborate use of it. Substance is that which exists independently and needs nothing else in order to be conceived. The ultimate reality is obviously such a substance. But what follows from the definition of substance is that substance is unlimited, eternal, self-caused and necessary, and is therefore one. The dualism of Descartes is thus rejected. Matter and mind cannot be substance, because they are two and, as shown by Descartes, dependent upon God.

Matter and mind are, however, two of the numberless attributes of substance. The world has both a material and a mental aspect, although it is in itself a single indeterminate entity. The countless particulars of the world are only so many 'modes' or forms of the self-manifestation of substance. The world is a single structure in which all finites are absolutely 'determined' by one substantial whole. Spinoza's system thus turns out to be monistic in both senses; and we may call him a neutral monist (or singularist). We may also call him a pantheist, insamuch as he identifies substance with God and describes Him as at once the 'source' and the plurality of all finite beings.*

We have, however, other sorts of neutralism advocated by some great pragmatists and realists of contemporary times. William James identifies reality with the immediate facts of experience, which are neither physical nor mental. The realists like Moore, Russell and Santayana reduce the world to sense-data or sensa, such as colour, touch, smell, etc. As epistemological dualists, they distinguish objects from facts immediately known. Objects, they say, are 'logical constructions' out of the elements of sense-data (cf. Critical Realism). Russell, in one place, describes the sense-data as *events* and presents himself as a neutral monist. He maintains that objects are made of the same neutral elements. The physical and the mental are only two aspects of the same elements viewed from two perspectives. The same cluster of elements or events is physical in relation to another external cluster, but mental in relation to the knower. In his own words: "It will be seen that the view which I am advocating is neither materialism nor mentalism, but what (following a suggestion of Dr. H.M.

* God or substance is at once (i) the 'source' of all beings, and (ii) the 'plurality' of all beings. In the first sense, He is *natura naturans* (creative nature); in the second, *natura naturata* (created nature).

Sheffer) we call "neutral monism". It is monism in the sense that it regards the world as composed of only one *kind* of stuff, namely, events; but it is pluralism in the sense that it admits the existence of a great multiplicity of events, each minimal event being a logically self-subsistent entity."[11]

But, among the modern realists, it is Samuel Alexander who builds up a gigantic metaphysical system on a neutral basis (in his *Space, Time and Deity).* He goes even further than other realists and says that the ultimate stuff is a complex of space and time. Space and time cannot live apart; space without time is a mere void, and time without space is a mere succession of unconnected instants. Time contributes to space its necessary element of distinctness of parts, while space contributes to time its essential element of continuity which connects the instants. Thus the basic matrix of things is space and time hyphenated, i.e., Space-Time. This space-time is the same as pure motion composed of point-instants. All things, including living, mental, and even divine beings, are only the more or less complex groupings of such point-instants.*

*Cf. Alexander's theory of Evolution. Chater XVI.

NOTE

Appearance and Reality

The distinction between 'appearance' or phenomenon and 'reality' or noumenon is, as we have seen, fundamental in philosophy. Naturally, this is fundamental to truth-seeking of any form. But it is very particularly important in philosophy, since philosophy seeks to be fully critical and to transcend all doubts and imperfections. In this respect, philosophy even claims to surpass science. While science relies upon experience and applies methods of observation and experiment, philosophy undertakes an examination even of such fundamentals of science in order to develop its own world-view.

Appearance or phenomenon simply means 'manifestation', and reality 'the objective entity' or 'actual state of affairs' which manifests itself. Appearance is what something appears to be, and reality what it is in itself. The former is, as it were, the outer, while the latter the inner aspect of something. In other words, appearance is how a thing looks to an observer, and reality is what it looks to itself. Appearance is or may be, more or less, a distortion or falsification of the real state of affairs.

This distinction between appearance and reality is not exclusively a matter of science and philosophy; it is a common experience. Mistaking a rope for a snake is an age-old example. We have many illusory experiences; and we call them illusory because we believe that through them facts 'appear' to be what they are not. A man in disguise, a veteran fraud having the make-up of a pious man, a female spy wearing the mask of a male, a chameleon—these are only a few of the many common instances of the appearance-reality distinction.

The philosopher's great question is: Is the world of experience the very real world, or is it a mere appearance of a reality beyond? Answers to this question (as we have seen) have been various. We find the first great instance of distinguishing between appearance and reality and stamping the sensible world as an appearance in the Vedantic system. In the West, similar positions have been upheld most notably by Plato, Spinoza, Kant and Bradley. It is probably the last two who have argued most elaborately to show that the world of ordinary experience or even the world of scientific observation and logical construction is an appearance. Kant's philosophical position is known as phenomenalism, and the name of Bradley's major work is 'Appearance and Reality'.

CHAPTER XVI

MATERIALISM

1. Materialism explained

Materialism is the ontological theory, according to which the ultimate stuff of the world is matter. All beings, including even animals and men, are made of material elements. In older materialism, these elements were assumed to be very minute mass particles, called atoms. Matter was ragarded as an inert substance having extension and impenetrability as its essential attributes, and motion as its primary form of activity. Everything was explained in terms of atoms in motion. In modern materialism, inert matter has been replaced by dynamic energy, atoms by eletronic particles.

Materialism is based upon certain essential presuppositions. It is allied to empiricism and realism. It takes for granted the existence of the world of experience and believes that our senses, when properly applied, are capable of knowing that world. It presumes the objectivity of space, time, motion and change, as well as the finite, independent and eternal nature of matter. Thus, finally, materialism looks upon the world as an unlimited, self-existent structure composed of countless atoms or energy particles. Each object is an aggregate or system of such particles, and every event is a case of motion or change of position of these particles or things made of them.

Materialism is monistic (qualitative monism) in so far as it assumes matter or energy as the only stuff. But there is a secondary sort of pluralism within this monism. Older materialists postulated different ultimate types of matter; and even modern materialism believes in many types of electronic particles, such as electrons, protons, positrons, etc.

Materialism explains both life and mind in terms of matter and motion. Thus, in explaining life, it sides with mechanism rather than vitalism. (In fact, mechanism and materialism are two aspects of a common doctrine.) An organism is regarded by it as only a more complex machine. It explains mind either as an attribute of body, or as an effect or by-product of it, or even as identical with a part of it, i.e., the brain. It is closely

associated with the mechanistic theory of evolution advocated by Lamarck, Darwin and many others. It believes in the abiogenetic account of life and mind[†] and robs the world of all design and purposiveness. Materialism thus does away with all qualitative distinctions. All observable distinctions of kind between qualitites of things, such as colour, taste and smell, and between higher and lower categories, such as matter, life and mind, are in fact only 'apparent'. Things differ only quantitatively. They are only more or less complex, and contain particles having different numbers, different positions or diverse motions.

Materialism is intimately connected with physical sciences and takes pride in building upon a foundation constructed by up-to-date scientific findings. The materialists are naturalists in laying emphasis upon the naturalistic method, viz., the method of explaining everything by *vera causa* (true cause), i.e., natural causation. Generally, they are atheists and look upon the human values as subjective or conventional. "The sting of materialism" as Hornle puts it, "lies in its three denials."

1. It denies that nature as a whole, or in its living parts, is the creation of God.

2. It denies that minds, human or animal, are operative as *vera causa* in the behaviour living beings.

3. It denies the existence of any 'vital force'. It is a protest against talking of natural phenomena in the language of life, or mind, or of God.[1]

2. History of Materialism[*]

Materialism has a very long history. While in the East the Vedic idealism is the first known system of thought, in the West the very father of philosophy, Thales, who flourished about the 6th century B.C., was a materialist. He was immediately followed by Anaximander and Anaximenes and afterwards by Heracleitus, Empedocles and Anaxagoras. Greek materialism took an elabroate scientific form among the Atomists during the 4th century B.C. It received strong oppsition from Plato and Aristotle, but was later on adopted by the Epicureans, the stoics and also the great Roman poet, Lucretius (1st century B.C.) In India materialism, in a perfect or imperfect form, was advocated by the Carvaka, the Buddha and the Jaina Schools.

The middle ages are dominated by theistic dualism and pantheism under the influence of religion. The modern age finds its first materialistic

[†] Materialism's account of life and mind is obviously the most important part of the doctrine and deserves elaborate treatment. For life, see Chapter X, and for mind see Chapter XVIII.

[*] See also Chapter X.

system in Thomas Hobbes in the 17th century. All things, he said, are bodies and all events, physical or mental, are motions. The eighteenth century was virtually the heyday of materialism. "The materialistic worldview", as Thilly puts it, "made its headway in England and France during the eighteenth century, and by the end of that period had become a popular doctrine in the enlightened circles of the latter country."[2] We may mention Diderot (1713-84), La Mattrie (1709-51), Holbach, and John Toland (1670-1721) as representatives of materialism of this time. Then, for some time, the field was under the domination of German idealism—particularly of the Hegelian system. But by the middle of the nineteenth century and after, materialism had a revival and gained some vigorous followers in Germany, such, for example, as Karl Vogt, Moleschott, L.Buchner and Ernst Haeckel. Besides, Marx, Engels and the Marxists in general are well-known for their forceful advocacy of Materialism.

It must be noted (as in the next section), however, that materialism does not appear in a homogeneous form in all ages or in all schools. Recent scientific researches have reduced matter to energy and made 'evolution' a principal key-concept of scientific explanation. As a result, there is hardly any representative of materialism in the traditional sense. More precisely, materialism has given way to mechanism and naturalism. It now means that reality is to be identified with 'Nature' and nothing is to be explained by supernatural or final causes but only by the laws of physical science. Understood in this sense, materialism may be said to have been represented in the present century by a large number of thinkers, including many biologists and psychologists. Mention may be made of T.H. Huxley, Jacques Loeb, A.P. Weiss, Lloyd Morgan and J.B. Watson, the behaviourist.

3. Forms of Materialism

(a) **Hylozoism** : Matter has been conceived by the materialists in different ways, with different associations and implications. It is, therefore, that we have different forms or types of materialism. The materialists of early Greece usually ascribed a sort of vitality to matter. Such a position—the position that matter is endowed with life—is called hylozoism (Gr. Hyle=matter + zoe=life). Materialism long retained its hylozoistic colour. It is clearly visible even in the nineteenth century thinker, Ernst Haeckel. Matter and ether, he said, "are not dead and only moved by extrinsic force, but they are endowed with sensation and will....[3].

(b) **Atomism** : It is that theory of materialism which describes the

ultimate particles of matter as 'atoms.' The atomistic school was established in early Greece by Leucippus and Democritus and was later on revived by the Epicureans. The Greek atomists maintained that the elements of the world are atoms, and that these atoms do not differ in quality, but only in size, shape and velocity. All changes are the results of their downward and upward movements. Qualities of things are due to the size, shape, arrangement and positon of atoms. Fire is composed of smooth and round atoms, and the soul of man made of exceptionally pure and refined fire. All events and becomings are produced and determined absolutely by mechanical causes.

Atomism, in its early form, was speculative. But it reappeared in a scientific, experimental form in about the middle of the eighteenth century. Scientists led by John Dalton showed that all bodies can be analysed into atoms. These atoms are of many kinds, and hence there are as many kinds of elementary substances, such as hydrogen, oxygen, nitrogen and so on.

(c) **Energism :** The latest electronic conception of matter renders materialism into a position which may better be called 'energism.' On further analysis, atoms resolve themelves into particles of electro-magnetic energy. Hence the world should be regarded as made of energy rather than matter.

(a) **Equative, Causal and Attributive Materialism :** Oswald Kulpe (1862-1915), in his *Introduction to Philosophy*, distinguishes between these types of materialism, on the basis of the nature of interpreting mind. As we have already seen, equative materialism claims that mind is the same as a part of the body; causal materialism explains mind as an effect of the body; while attributive materialism regards mind as a quality of the body.*

4. Dialectical Materialism

This is another theory of materialism propounded by Karl Marx (1818-1883), in collaboration with Frederick Engels, both of whom were born in Germany. It appears in Marx's famous work 'Das Kapital' (1867-1894) and some other works of Marx and Engels. Ontologically, it combines materialism with Hegel's dialectical method of evolution. According to it, the world evolves dialectically, i.e., by synthesizing theses and antitheses at progressively higher levels. But, unlike Hegelism, it conceives the unlimate reality as matter and not as spirit.[4] Matter evolves dialectically, and man with his mind and all distinctive characteristics emerges at the highest level of evolution.

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* For details, see Chapter XVIII. Sec.9.

But, although mind is a product of matter, it is capable of acting upon matter. Man is able to mould his environment and his own history. Evolution at the human level is social evolution. While evolution at the pre-human levels is determined by the laws of the dialectical movement of matter, the evolution of human societies is determined by economic factors, i.e., by the methods of production. Economic inequalities and the accumulation of wealth in the hands of the capitalist bourgeoisie are due to the institution of private property. All existing class struggles are actually conflicts between capital and labour. The last dialectical triad of social evolution will consist of the capitalist bourgeoisie as the thesis, and the destruction of the capitalist bourgeoisie as the antithesis. The synthesis will consist in the emergence of a classless society, in which wealth will be equitably possessed by all men.

Dialectical materialism is thus, unlike the other materialistic theories, based upon the dialectical method; but, like them, it excludes all teleology and subjectivism. It is atheistic and looks upon religion wtih contempt as the invention of the crafty priests and capitalists with a view to exploiting the proletariat. It allows truth and morality only a human significance and a practical value. It favours *revolution* and believes that the classless society will emerge through an armed uprising of the proletariat.

5. Arguments for Materialism

Materialism advances certain arguments in support of its thesis. Its principal burden is to explain life and mind in terms of matter. Naturally, therefore, these arguments relate mainly to the materialistic account of life and mind. Materialists or the schools of materialism more or less differ in their overall positions. The more common and more important of their arguments, however, are as follows:

(1) The materialist explains life and mind by reducing them to physical processes, and such an explanation is alleged to be fully and solely consistent with the notion of causality. A cause is a phenomenon immediately antecedent to or concomitant with the effect. Chemical analysis shows that an organism is made of the same ultimate substances—carbon, hydrogen, oxygen, etc.— as any ordinary physical object. Vital phenomena are invariably associated with internal chemical changes of the organism. Observation reveals that mental processes are either immediately preceded or accompanied by physiological processes. Hence life and mind are duly explained if these changes and processes are pointed out.

(2) The supposition of life and mind as separate categories violates the law of conservation of energy. The law demands that there is a constant stock of 'physical' energy in the world. But it is a fact of experience that

physical energy is being exploited in vital operations (an animal assimilates food in order to be able to move) and physiological energy in mental operations (nerve-currents from sense-organs are essential to the production of sensations). There is thus a loss of physical energy. On the other hand, an organism sets an inanimate body to move: or our mind, in willing, apparently causes the movements of our limbs. In this case, there is an increase in physical energy.*

(3) Many biological and psychological phenomena, previously considered to be physically inexplicable, have been so explained. It may therefore be expected that with further advancement of knowledge the remaining phenomena will be similarly explained. Artificial fertilisation and hatching, the essential relation of mood and temper with internal gastric conditions or glandular secretions—all these lend support to the materialist's claim.

(4) Modern cosmology or theories of evolution strengthen the materialistic hypothesis. Man has been shown by many biologists, headed by Darwin, to have evolved mechanically out of a very low origin. It has been further shown that there was a time when the earth was absolutely unfit for habitation. Thus it follows that life has gradually appeared out of lifeless matter, and mind from bare life. The earliest living germs were created through accidental chemical combination of material particles. Organisms gradually assumed higher and higher forms to develop, at a certain level, their peculiar characteristics of consciousness, thought and will.

(5) Comparative anatomy discloses a close parallelism between the nervous system and mind. The greater the relative size and complexity of the brain, the higher the mental powers. Man, as the most mentally developed, possesses the greatest relative size and complexity of the brain.

(6) The apparent dependence of mental processes upon the brain and the nervous system is a simple evidence in support of materialism. No excitation of the nerves by stimulus, no sensation. A severe injury to the brain means a temporary or even permanent loss of consciousness. Moreover, pathological researches show disturbances in the brain corresponding to disturbances in mental life. There is no psychosis without a corresponding neurosis.**

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* "Should we grant that a mere intention as such, a mere conscious state, can cause a movement, we should thereby surrender the fundamental principle of natural science....If a mere thought can move a brain-molecule, it can just as easily transpose mountains or turn the moon from its path: the one thing is just as intelligible or unintelligible as the other." (Paulsen: *Introduction*, p.65)

** For further details the reader is advised to read section 8 of Chapter X and the materialistic account of mind in Chapter XVII.

6. Practical bearing of Materialism

Certain conclusions evidently follow from the general ontological position of materialism. In fact, materialism has important bearings on morality and religion—in a word, on man's general practical attitude.

Man believes in certain values, known as the higher values of life—such as truth, beauty and goodness. These are considered to be objective, absolute and eternal, and to constitute man's unique status and superiority over other species. But if matter is the ultimate and only reality, the objectivity and absoluteness of these values cannot stand; because mind alone is capable of such values. Matter cannot distinguish between true and false judgments; matter cannot be said to appeciate beauty. And if man is a machine, mechanically determined or devoid of freedom of the will, no scope is left for choosing between right and wrong; nay the distinction itself becomes illusory.

Thus, theoretically, freedom being an essential condition of moral action, materialism renders the same impossible. But, practically, the real consequences are likely to be even more disastrous. Because at least at the level of ordinary people, the existence of the almighty God and life after death are the strongest (if not the only) motive for moral action; but materialism excludes or contradicts both of them. God, as a spiritual entity, becomes inconceivable; and man's life obviously comes to an end with the disintegration of the body after death. Thus materialism seriously affects man's moral impulses and aspirations.

In fact, materialism has often clearly brought out its practical bearings. Either it has professed a life of earthly pleasures, or at least pictured the higher values as subjective, or merely social or conventional. We find a vivid instance of the former among the Indian Carvakas; and of the latter among the communists and the nineteenth-century naturalists.

Materialism implies atheism, and, in fact, materialists have been atheists. Materialism cannot be consistent with the belief in God as generally understood. Marvin's suggestion that God can be material is not agreeable to the believers. As generally conceived, God is a spiritual entity possessed of unqualified perfection and absolute creativity; and, above-all, He is a *person* capable of deliberation and will. It is obvious that, in the eyes of materialism, such a being cannot and does not exist. The practical consequences of this are tremendous. All religious scriptures turn out to be full of phrases that are either false or merely symbolic; and all religious practices, mere conventions having at best a disciplinary value. In fact, religion has often been so treated by materialists avowedly. It has been condemned as a cheating device invented by the clergy for their

livelihood, or, as the communists say, by the bourgeoisie for the exploitation of the proletariat.

But religion or God is not merely a matter of theory or practice, but relates to still deeper human cravings. To many He is the highest object of love and desire. Again, by many morality is valued not only as a guarantee of welfare and social health, but as the surest mark of man's dignity as man. Hence, materialism deprives such people of most of the charm and excellence of life, and may even rob them of their very urge to live.

7. Comments[5]

Theoretically, materialism has certain great merits. It has close affinity with science. It is realistic and provides us with a concrete world to live in and study. It is monistic and and pictures the world as governed by laws and not as a choas which is unfit for study and in which the future is uncertain. It purges our thought of crude supernaturalism and anthropomorphism and stimulates scientific inquiry.

But it has been criticised on many grounds as unsatisfactory by the idealists who advance an exactly opposite theory. It is obvious that it shares most of the merits and demerits of mechanism and naturalism (since it is intimately connected with them), and deserves similar criticisms. Some of the criticisms that have been set against it are, however, as follows :

(1) Materialism seeks to explain the world as a system of self-existent material particles governed absolutely by natural laws. This mechanistic position cannot explain, but only explains away, the marks of design, unity, order and harmony that prevail in Nature. These can be explained only by identifying the reality as an absolute spirit or at least by commending the world to the control of such a spirit. Materialism is subject to all the criticisms that ought to be levelled against mechanism.

(2) Materialism fails to fulfill its greatest pledge or justify its fundamental claim, viz., the explanation of life and mind in terms of matter. As the vitalists argue, an organism always certain unique characteristics such as assimilation of food, breathing and reproduction—which do not permit its identity with a mere machine, however complex the latter may be. Similarly, the peculiar faculties of mind, such as thinking, feeling and willing, represent it as something higher and essentially different from bare life. There are real qualitative distinctions among things. And these can be explained only by supposing them to be potentially contained in the original stuff.

(3) None of the three forms of the materialistic account of mind seems satisfactory. Mind cannot be an attribute or function of the brain. The brain

being material, its only function is motion; but mind is not perceived as motion. If consciousness is an epiphenomenon of the brain, it is not understood how mind could know or act upon the body. Lastly, the identity of matter and mind is never experienced. Rather mind is experienced as something quite different; and, as Marvin suggests, if facts are to be reckoned as proof, materialism must give way.[6]

(4) Materialists deserve the credit of showing the close relation between physiological and mental processes. They rightly point to experimental findings of correspondence between them. But 'dependence' must not be mistaken for 'identity'.[7] "Consciousness.", said Reymond, "cannot be explained by material conditions." Paulsen argues that, once we accept that thoughts are movements in the brain, we cannot accuse the materialist of not showing 'how', since that falls outside the usual scope of scientific explanation. But the fact is that the identity of thought and movement is a sheer absurdity. "To say that thought is at bottom nothing but a movement is to say that iron is at bottom made of wood. No argument avails here."[8]

(5) And yet the only view consistent with materialism is this identity. When, otherwise, the materialist regards mind as a product of matter, or says that physical energy is transformed into mental energy, he violates the law of conservation of energy and contradicts the principle that nothing can come out of nothing. Such transformation would obviously mean an absolute loss of physical energy. Again, mind and matter being entirely opposed, the comming out of one from another, means coming of something out of nothing.

(6) It is also argued that materialism is easily disproved by epistemological considerations. Knowledge presupposes the duality of subject and object. The object may be material, but the subjcet must be something non-material—some active sentient agent. Matter cannot possibly be known by matter itself. The description of perception as a simple relation of impact of matter upon senses or as a mechanical response to a stimulus is rejected as an over-simplification of the process.

(7) Materialism is alleged to have dangerous practical consequences. It deprives man of his higher values, of his dignity and noble aspirations. It leads to atheism and encourages hedonism and subjection of oneself to petty worldly pursuits.*

* We shall make a final review of the important ontological positions at the close of this part. The reader may consult that for a final assessment of materialism.

CHAPTER XVII

IDEALISM

1. Different meanings of 'Idealism'

The word 'idealism' has been used in different senses and has developed various shades of meaning. It derives either from 'idea' or 'ideal', and immediately stands for two philosophical theories, of which one is epistemological and the other is teleological. But the adjective 'ideal', drawn from 'idea', has undergone an extension* of meaning; and, accordingly, 'idealism' has come to denote a third philosophical theory which is ontological.[1]

Thus, although idealism has other connotations, in philosophy it stands for three different but allied positions: (a) it denotes the epistemological theory according to which the so-called external objects are partly or wholly ideas in some mind, either human or divine; (b) it stands for the teleological doctrine according to which the world is not a mere aggregate of atoms but is characterised by an inherent urge towards the realisation of an ideal, moral or otherwise; and (c) idealism is an ontological theory which conceives the world as rooted in mind or thought, or is somehow dependent upon it. In the first two senses, idealism is opposed to realism and mechanism, respectively. And in the third sense, it is opposed to all non-idealistic theories of reality, but most directly and strongly to materialism. Idealism in this sense is also called spiritualism. In fact, this name is preferable insofar as it marks out the theory from the two other types of idealism. But the name 'Idealism' has a far greater currency than 'spiritualism'.

2. Idealism explained

Idealism, as a metaphysical theory, maintains that the world is grounded in mind or its basic stuff is mental or spiritual. It is diametrically

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* 'Ideal' means : (1) Pertaining to ideas. (2) Mental. (3) Possessing the character of completely satisfying a desire or volition. A state of perfection with respect to a standard or goal of will or desire. (4) A norm, perfect type, or goal, an object of desire or will whether or not conceived as attaintable. (Runes. *Dictionary of Philosophy*)

opposed to materialism which explains the world as grounded in matter. and is also called spiritualism. In distinguishing between reality and appearance. it defines the former as mental or ideal, and identifies the latter with the physical objects of ordinary experience. Common sense believes in the existence of an external world and conceives it as made of living and non-living bodies. But idealism either explains away the external material world or resolves it into a mere appearance or self-manifestation.of the spirit. At any rate, it asserts mind or thought as prior and primary, and regards matter as derived and secondary.

Idealism has been advocated by numerous philosophers and has appeared in a great variety of forms. But, in its general form, it betrays a strong opposition to materialism and mechanism, and lays emphasis on our inner experiences of mental life. It says that the clue to the ultimate nature of things is not to be sought among material bodies or physical forces, but among the states and processes of our mind. Consciousness, thought, intelligence, reason, and our moral and religious ideals are not secondary or subjective. Rather, they are the genuine ingredients of the real. Matter is either illusory or at best a mere externalisation of the thought-content or spiritual essence of the reality. The real forces of the world are mental, and the so-called laws of nautre are, in their final analysis, logical or psychological in character. In the eyes of idealism, the physical sciences, in spite of their great accuracy and utility, are confined to mere phenomena. Idealism seeks to go deeper into things and to grasp at the very core of reality.

Along with materialism, it rejects mechanism as well. All becoming is to be explained, not by antecedent material conditions, but as the operation of the universal spirit. The world has an intrinsic urge to realise some ideals, moral or otherwise, or to reach a level of perfection. It is not without a purpose, not "a tale told by an idiot, full of sound fury, signifying nothing." It exists as a means to the realisation of some eternal, inherent purpose.

Thus idealism rejects all mechanistic conceptions of evolution. The world has not evolved out of matter or space-time. Life and mind are not mere repetitions of matter, nor only more complex forms of matter, higher levels of refinement emerging from the lower. Rather mind is primary, and matter and the lower forms of life are only its inferior modes or imperfect manifestations. The universal spirit evolves because it is moved by its own innate laws of thought; not because it is pushed from behind, but because it is drawn towards some ideal ingrained in its very essence.

Idealism is monistic from the qualitative stand-point. But,

quantitatively, it has been usually monistic, although there are pluralistic forms as well. As a rule, it has had a rationalistic background; but there are important empirical exceptions. Compared with materialism; it is speculative, optimistic and liberal, having moral associations and religious leanings. It is convinced that (a) the reality is knowable, because it is of the nature of mind or thought, and (b) it is essentially good, in spite of apparent marks of evil.

3. The History of Idealism

The history of idealism is perhaps as old as philosophy. "To write the history of Idealism", as Patrick has aptly said, "would be almost to write the history of philosophy, so many of the world's great thinkers have been Idealists."[2] The oldest system of philosophical thought, i.e., the thought of the Vedas and the Upanishads, is essentially idealistic. According to it, the ultimate reality is Brahman (the World-soul) and the world of experience is merely a 'maya' (illusion). In the West, the first idealistic system is presented by the Greek philosopher Plato (427-347 B.C.). Even before him marks of idealism are visible in the thought of the Eleatics and Anaxagoras. The Eleatics condemned the sensible world as not-Being, and defined reality as pure Being. Anaxagoras, though primarily a materialist, brought in the concept of the Nous or the Soul to explain the origin of motion.

But idealism in a strict ontological sense may be said to have appeared in Western thought after Descartes' rigid distinction between matter and mind. In this strict sense, Berkeley is the first idealist. He was followed by a good number of German idealists, including Leibniz, Fichte, Schelling and Hegel. Hegel's absolutism, which flourished during the first quarter of the 19th century, had a lasting influence on subsequent thoughts. It received strong opposition from the French and the German materialists and naturalists of that century. But, in spite of that, it held the field predominantly, being represented by such thinkers as Bosanquet, Bradley, Green and Caird.

The 20th century has, however, seen the rise of certain schools—such as the pragmatists, realists, existentialists, etc.—which have tried to counteract the idealistic trends and have attained considerable success. But of late there have been fresh uprisings of idealism. There is the neo-Idealistic school represented chiefly by the Italian thinkers, Benedetto Croce and Giovanni Gentile. In the East we have synthetic and humanist types of idealism, having a practical and religious colour. Among their representatives, we may mention Radhakrishnan and Sri Aurobinda of India, and Allama Iqbal and Dr. G.C. Dev of Pakistan (1968).

4. Types of Idealism

In its long history idealism has appeared, even as an ontological doctrine, in many different forms. Certain types of idealism have been based upon epistemological considerations, others on logical, metaphysical or axiological considerations. The subjective idealism of Berkeley, for example, is based upon epistemological considerations. Kant's epistemological position is itself idealistic—phenomenalistic idealism; but, notwithstanding his denial of the possibility of metaphysics, he may be said to have offered a theory of reality which in part has a moral origin. The spiritualism of Leibniz, the absolute idealism of Hegel, the panpsychism of Fechner are based upon logical or metaphysical considerations. But it must not be forgotten that these different standpoints are not without relations; rather often do they involve each other.

However, idealistic theories vary not only with respect to their basis or background, but also with respect to their final conclusions, their definitions or detailed characterisations of reality, their conceptions of the relation between reality and appearance, as well as their moral and religious bearings. Acccordingly, we have a large variety of types, from the 'Brahmaism' of the Upanishads down to the Absolutism of Bradley and Bosanquet, or even thereafter. We shall now consider in brief a few of the most important of these different types.

5. Subjective Idealism: Berkeley

According to this type of idealism, the subject or the knower is alone real. The known or the object has no independent existence outside the subject. Things known are only *ideas* in some subject or other. Their 'esse' or existence consists in their 'percipi' or being perceived. Thus the real exists only as a subject, but a subject is a mind; hence, the real is a mind or a group of minds. In a word, reality is a realm of subjects or minds with their ideas, and the external objects of day-to-day experience are only clusters of such ideas in them.

George Berkeley, an Irish bishop of the 18th century, presents a typical instance of this theory. He said that the real world consists only of minds or spirits. Of these spirits, God alone is infinite and absolute, while the others are finite. He advances a long chain of arguments (See Chapter VII) to show that there is nothing like an external physical world. He presumes that materialism or belief in matter is a false philosophy misleading man into sin and evil. He tries to show that the very notion of matter or extra-mental object is self-contradictory, and hence materialism is baseless.

Berkeley's idealism rests upon his empirical theory of knowledge.

More precisely, his metaphysical idealism is based upon and blended with his epistemological idealism. He argues that our perception of any object is virtually a perception of certain sensible properties. We cannot even think of anything without thinking it as merely a cluster of qualities. But analysis of perception shows that every percept of a quality is relative to and dependent upon our mind. Hence all qualities and, therefore, all things are nothing but our ideas. But matter is presumed to be something external to our mind and absolutely different from an idea. Hence the conception of matter is an absurdity, an 'evident contradiction'.

But objects are not therefore altogether unreal. They exist primarily in the mind of God; and our ideas of them are only the reproductions of divine ideas. The laws of nature are the ways in which God perceives His ideas and reproduces them in finite spirits.

6. Comments

Berkeley's subjectivistic idealism is also known as subjectivism, psychism or mentalism. It must be celarly distinguished from solipsism, accroding to which, only the individual knower's own mind and its ideas are real. But this distinction has been reckoned both as a merit and a defect of Berkeley's system. It is a merit, because solipsism is evidently an untenable position. It is a defect from the stand-point of consistency. Hume afterwards showed that from ideas we cannot pass on to mind as a substance. It is alleged that Berkeley only stopped half-way and did not bring out the fullest implications of his empirical premises.

Obviously, Berkeley's metaphysical idealism stands or falls with his epistemological idealism. The latter has never been widely accepted. Modern realists have made organised efforts to flush out the various fallacies contained in it (see Chap. VIII, Sect. 15).

Berkeley's arguments are quite witty and interesting. His resolution of matter into ideas has, otherwise, close affinities with the sense-data philosophy of the pragmatists and some of the modern realists, such as Bertrand Russell. But his subjectivism—that nothing can exist unperceived—does not follow therefrom. Berkeley seems to have been too enthusiastic about his mission of refute materialism. But he failed to realise that refutation of materialism need not be based upon subjectivism. The principal task of idealism is to explain matter; but, without explaining it, Berkeley explains it away.

7. Objectiye idealism

According to objective idealism, both the subject and the object are

real. They are the finite or imperfect manifestations of a reality which is itself spiritual. This theory, again, appears in various forms. Plato conceives reality as a realm of archetypal ideas, Hegel as an absolute all-inclusive spirit. Hence, Plato's theory may be called archetypal idealism; while Hegel's system is well-known as absolute idealism or absolutism.[3] Absolutism is illustrated in Vedantic speculations even before the dawn of Western thought, and in many systems following Hegel.

8. The Vedantic Idealism

This is the oldest system of idealism set forth in the Vedanta, by which is meant the Upanishads. The oldest of the Upanishads were composed before the beginnings of Greek philosophy. The Upanishads have been interpreted by a number of great Indian thinkers. Sankara (9th century A.D.) and Ramanuja (11th century A.D.) are the most well-known of them; and, between these two, the influence of the former has been wider and more lasting.

As interpreted by Sankara, Vedantic thought assumes the form of absolute idealism which may be classed as strict singularism. God or Brâhma is the only reality. There is no plurality without or even within Him. The world of experience, with all its variety and multiplicity, is only an appearance, an illusion. God produces this illusion by His mysterious magical power called Maya. It is only because of ignorance that we mistake the external world to be real.

Ramanuja, however, interprets the Vedanta in a slightly different way. According to him, unconscious matter and conscious souls are eternally present in God. While, according to Sankara, God is a pure unity and without qualities, according to Ramanuja, God is a multiplicity in unity and possessed of the supremely good qualities like omnipotence and omniscience. A spider spins its cobweb out of its own body. So God, says Ramanuja, creates material objects out of eternal matter.

The Vedantic idealism entails a rather austere philosophy of life. Liberation of the soul, according to it, is possible only through freedom from ignorance, which consists in realising that the body is an illusion. Ignorance can be removed by a study of the Vedanta.

9. The Archetypal idealism of Plato

According to Plato, reality is a realm of 'ideas' or 'forms' which are the archetypes or original patterns of things. Plato clearly draws a distinction between reality and appearance, and identifies the latter with the world of experience. Following Socrates, he maintains that knowledge is always knowledge of concepts. Knowledge can be true only if there are

real objects corresponding to it. Hence there must be a world of real concepts corresponding to our concepts. Such real concepts are the 'forms' or essences of things, and their world is the very real world. The sensible world is only a shadow or copy of that real world. The real is permanent. But objects of perception are ever changing, coming into being and passing away. Hence they are not real. Their unreality also follows from the fact that their essences, i.e., the ideas exist away from them somewhere 'up in the heavens. But they are not fully unreal. They are real insofar as they copy, embody or 'participate' in the ideas. They are, therefore, only partially real, while the ideas are fully and truly real.

Particular actual horses, for example, are born, change, and then someday they perish. Hence our sensuous knowledege of any particular horse is necessarily imperfect. We can have no knowledge but only an 'opinion' about it. Knowledge in the true sense of the term is knowledge of the idea or form of horse in general (horseness).

Ideas, says Plato, are not things but 'thoughts.' But they are objective, extra-mental and eternal substances. To each class of things there corresponds only one idea. Higher and lower ideas constitute a hierarchy, the highest idea being the idea of Good. Plato identifies (though not always) God with this idea of Good.

10. Criticism

(a) Plato's theory looks idealistic in all the three senses of the term 'ideal'. Reality is made of ideas (idea-ism). But since ideas are objective *existent* thoughts, reality is virtually mental (spiritualism). Again, the ideas are ideals in relation to sensible objects and the supreme idea is that of Good (ideal-ism). This theory is thus a typical instance of idealism and emphatically upholds the moral tone of idealism in general. But it is obvious that it cannot be classified as spiritualism in a strict sense.

(b) It has, however, been attacked on the ground of undue abstraction. Even his pupil, Aristotle, advanced an elaborate polemic against it and argued that the essence or the universal cannot be separated from its particular embodiments. 'Cowness', for example, cannot be conceived to *exist* in separation from particular cows, or horsensess from particular horses. Aristotle is nearer to common sense and science than Plato

(c) Plato seems to have left the gulf between the real and the phenomenal unbridged. This throws a shade of dualism on his system. He distinguishes between Being which is idea and not-Being which is matter. Sensible objects have the status of *becoming* (being+not-being), being made of matter embodying ideas. Such a reduction of matter to not-being

is hardly a satisfactory explanation.

(d) Platonism appears to be a specimen of mysticism. It is difficult to understand how ideas, which are universal, could be conceived as having 'existence'. Existence may be said to belong only to the concrete and the particular.

11. The spiritualism of Leibniz

Leibniz upholds another type of idealism in his work, *Monadology* (La monadologie, 1714). According to him, the world is, in reality, an aggregate of countless monads, the extended physical world being only an appearance. Like Spinoza, he builds upon the notion of substance; but, unlike Spinoza, by substantiality he does not mean self-existence but self-activity. Again, like the Atomists he regards substance as indivisible, because nothing made of parts can be a primary principle. But he argued that, in order to be indivisible or simple, substance must be unextended or immaterial, because anything extended, however small, must be divisible. A substance is thus a self-active, unextended atom. Hence it is spiritual, because matter is presumed to be extended and inert.

Leibniz gives the name 'monad' (which literally means unit or unity) to such simple spiritual atoms. They are also called 'metaphysical points.' Mathematical points are true points, but abstract and unreal. Physical points are not true points but only compressed bodies. Only metaphysical points are at once 'true' and 'real' points. Such monads, living points or centres of spiritual energy, are taken by Leibniz to be the real constituents of the world. The essence of the monads is activity— the activity of perception or representation. (This representation is spontaneous, not a result of external stimulation, since monads are windowles.s) Each monad represents or mirrors the entire world from a particular standpoint and is different from every other monad. Each one is a microcosm—a separate little world in itself.

Monads are higher or lower according as they are more or less clear in their representation. In fact, there is a hierarchy of monads—unconscious, conscious and self-conscious. Material objects are made of bare, naked, unconscious or sleeping moands; they are in a state of stupor. Higher than these are the souls of animals, which are conscious monads having feeling and memory but not reason. Higher still are the self-conscious, rational spirits of men. The highest and the original monad is God, the 'Monad of all monads who creates the other monads and makes them work in perfect harmony (law of pre-established harmony).

Thus, according to Leibniz, the world is out and out spiritual. Material

objects are not dreams or illusions, but they are no better than phenomena.* Space and time are not real substances, but only the order of co-existence and succession of monads.

12. Comments

(a) Leibinz's view of matter as dynamic energy foreshadows the modern electronic conception of matter. The difference is that in the electronic conception energy is still physical, and not psychical as Leibniz supposed. His preference for activity to extension as the essence of matter is certainly an improvement upon preceding theories.

(b) But there are apparent difficulties in Leibniz's theory. His view of space and time is unsatisfactory; co-existence and succession of phenomena presuppose space and time and not vice versa. It utterly fails one's imagination to picture a world without any extension. Denial of space makes the monads overlapping; nay it reduces all monads to one. Plurality of monads thus seems to contradict the absence of real space.

(c) "Even his monads", says Russell, "can still be useful as suggesting possible ways of viewing perception, though they cannot be regarded as windowless." *(History,* p.619*)*. The windowlessness of monads renders Leibniz's theory pluralistic. But it also compels the introduction of pre-established harmony, which gives his theory a singularistic colour. Moreover, it implies 'parallelism' between our body and mind, which is not as such a satisfactory explanation of the body-mind relation. Modern physiology and psychology claim to show that mental phenomena are causally connected with the nervous system.

13. Absolute Idealism : Hegel and others

In Absolute Idealism, reality is pictured as an absolute all-inclusive spirit, and all sensible particulars as its finite but progressive manifestations. This theory has appeared in its most typical, comprehensive and magnificent form in the German philosopher, Hegel (1770-1831). But it was beforehand taking shape in Fichte and Schelling, two other German thinkers, and appeared and reappeared in different forms in many great thinkers after Hegel—such as Bradley and Bosanquet of Great Britain and Josiah Royce of America.

Reality, according to Hegel, is thought or reason. In opposition to Kant, he contends that reality is not only knowable by thought, but the two are virtually identical. Reality is, in fact, absolute reason, or an all-

* They are, however, *phenomena bene fundata* or well-grounded phenomena. They are stable and orderly. The proof of the reality of phenomena is our success in predicting future phenomena from those which are past and present. .

comprehensive mind, and Nature is only its externalisation or self-manifestation. Thought and reality being identical, the laws of thought are also the laws of reality. Thought operates dialectically; so does reality.[✞] Reality is originally pregnant with the potentialities of the world; it develops and manifests itself, and thereby evolves the world through a long series of triads. The first triad consists of 'being' as thesis, 'not-being' as antithesis and 'becoming' as the synthesis. Pure thought or Logic is itself a thesis, Nature its antithesis, and Spirit their synthesis. This is the grandest of triads, in which everything is included. We have the last triad with subjective spirit (the knower) as the thesis, objective spirit (society) as the antithesis, and Absolute Spirit as the synthesis. It is obvious that the Absolute Spirit is the supreme reality which embraces all finites within its fold.

Simply speaking, reality, in Hegel's view, is a universal all-absorbing mind in a ceaseless process of manifesting and realizing itself. This mind is pure thought. Originally it is unconscious and absolutely indeterminate. It is simply pure being or potentiality. But by the very force of its nature (in other words, by the very necessity of logic) it evolves dialectically and becomes more and more determinate, real, complex and perfect. Matter is not absolutely unreal, but constitutes a moment in the life of the Spirit and one of the many stages of its evolutionary movement. The Spirit is a single absolute whole; and all finites, including human souls, are more or less relative and limited manifestations of the same. The Absolute and the finites are related as whole and parts; neither is real without the other; but the whole is prior and determines the parts. All relations are internal, and the world is a single integrated spiritual structure. In the language of religion, reality is God thinking—God in His essential process of self-realisation through creation. This self-realisation, in its latest and highest phase, passes through art and religion, and attains its culmination in philosophy—nay, in the philosophy of Hegel himself.[4]

14. Comments

(a) Hegel's system, usually known as Absolute Idealism, is also called 'Pan-logism,' since it identifies logic (or thought) and reality. It has the great merit of being coherent and comprehensive. If philosophy is a matter of interpreting experience, Hegel deserves credit for trying to explain all types of experience. And if monism is supposed to be the ideal of philosophical thought, it must be noted that Hegel makes perhaps the most magnificent attempt to bring the entire universe under a single concept, namely, the concept of Absolute Spirit. Everything, or every phenomenon.

[✞] See Hegel's dialectical method, Chapter IV.

including even the social ones, is explained as the manifestation of one absolute reality.

(b) Such a position is often cited as the best example of 'singularism', i.e., the doctrine that the world is one or single in respect of both quality and quantity. Singularism leads Hegel and his followers to a theory of 'degrees' of truth and reality. Judgments are more or less true, and only those about the universe as a whole are fully true. Again, things are only more or less real, and the Absolute alone is perfectly real. Singularism, along with its implications, has been vehemently attacked by the modern realists, pragmatists and existentialists. Pragmatists criticise the absolutist's universe as a 'block universe'. And as Russell contends : 'I know numbers of propositions of the form "A is the father of B", but I do not know the whole universe. If all knowledge were knowledge of the universe as a whole, there would be no knowledge. This is enough to make us suspect a mistake somewhere.' (*History*, p.772)

(c) In fact, Russell goes so far as to say that "almost all Hegel's doctrines are false." Since reality is out and out thought, Hegel's view turns out to be that God or the Absolute is 'pure thought thinking about pure thought'. Russell caricatures such a God as "truly a Professor's God". It is, indeed, doubtful if Hegel succeeded in fulfilling the idealist's pledge, viz., the explanation of matter by mind. Hegel's derivation of the category of matter from idea, or his transition from Logic to Nature does not appear to be satisfactory. How can thought 'externalise' itself? The word 'externalisation' seems hardly better than a bad analogy.

(d) It is also contended that singularism cannot consistently leave room for the freedom of finite wills. The finite will, the individual ego, becomes only an echo of the Absolute. The pragmatists and existentialists strongly oppose this, and emphasize the reality and importance of the individual and his will. In fact, Hegel extends the dialectical method to the sphere of social evolution, and arrives at conclusions which are often obviously absurd. For example, he observes that the German monarchy of his time is the best form of government, and that there should be wars from time to time.

15. Other Types of Idealism

A few of the other important types of idealism are outlined as follows :

Ethical idealism : In Kant we have a certain type of idealism which may be called ethical idealism. His theory of knowledge ends in phenomenalistic idealism and denies the possibility of knowing God or even the human soul. But he argues (in his *Critique of Practical Reason*) that we can arrive at the existence of God and of the human soul from

moral considerations. First, moral action is not possible without the postulate of a real and free rational self. Secondly, moral virtue and happiness cannot be conceived otherwise than as inseparably connected; but happiness can be proportionately adjusted to virtue only by an all-powerful being like God. Hence we are entitled to believe in a real world consisting of God and rational selves.

Voluntaristic Idealism or Voluntarism : According to voluntarism, reality is of the nature of will or volition. The word 'voluntarism' derives from the Latin 'voluntas' which means will. The German philosopher Schopenhauer (Arthur, 1788-1860) is the best-known of the few representatives of this position. In his work, *The World as Will and Idea*, he conceives the world after the analogy of a man. He argues that our will, rather than intellect, is the more fundamental aspect of our being. Our body is the external manifestation of our inner will. Similarly, the world at large is the manifestation of an Absolute Will. This will is unconscious in the lower types of beings, but becomes conscious in man. More recent advocates of voluntarism are Wundt, (Wilhelm, 1832-1920) and Munsterberg (1863-1916), both German-born philosopher and psychologist. Elements of voluntarism are also found in the thought of another German thinker, E. von Hartman (1842-1906).

Pan-psychism : In pan-psychism, again, the world is conceived after the analogy of man. The world has two aspects— one physical and the other mental or psychical. Just as a man is both a body and a mind, a psycho-physical structure, so also is every body or every minute particle of the world. Mentality or psychic life is the inner essence of everything, while its physical aspect is only an outer appearance. This is true of each atom, as well as of the universe at large. The soul of the world is God. Thus everything is ensouled, everything is spontaneous activity, having life, mind and memory. Fechner (G.T., 1801-87) and Paulsen (Friedrich, 1864-1908), both of Germany, are important advocates of this theory. It may be found also in the writings of Lotze, Strong, Clifford and James Ward.

Personal Idealism or Personalism : This type of idealism is so called, because it lays emphasis upon the finite self, personality, and freedom of the individual. It is opposed to Hegelian absolutism in which the emphasis goes to the whole, the Absolute. Personalism emphasizes the part rather than the whole. The world is conceived as a society or republic of finite spirits, in which God is as it were the President. The whole or the Absolute consists of a finite God, and the finite spirits are working together for the realisation of values, particularly the moral value. The physical world is only an appearance, a manifestation or modus operandi of the Absolute.

Pringle-Pattison, in his work, *The Idea of God* (1917), has tried to explain the world as the self-evolution of God. This evolution is emergent and its latest phase is the emergence of man with individuality, freedom and consciousness of values. These values are the ends towards which God is moving; but their realisation is effected by God through human persons freely co-operating with Him. Among the other personalists with their differences, mention may be made of Bowne and Howison of America, and Stout, McTaggart and Rashdall of England.

Synthetic Idealism : Another type of idealism is emerging from the writings of the contemporary idealists of India and Pakistan (1968). Following one of them, we may call it 'synthetic idealism'.[5] It is so called, because it is catholic, compromising and synthetic in its outlook. It looks upon philosophy as essentially a concern of man's needs of practical life, an indispensable organ of personal happiness and indeed of the happiness of mankind as a whole. It is argued that philosophy can carry out its great task only on a basis of balanced synthesis. It must assimilate and synthesize both matter and spirit, both intellect and intuition, both science and religion, both this world and the other-world—nay, the old and the new, the East and the West. Synthetic idealism seeks to develop a world-view on a basis which is at once scientific, moral and religious.

It builds up a philosophy of life which is not one-sided but is able to do justice to the spiritual as well as the material aspects of our being, and thereby ensure lasting peace and universal brotherhood, relaxing all national and international tensions which grow out of greed and misunderstanding.

16. Comments

(1) Idealism has obviously some great merits and has in fact outdone its rivals in respect of popularity. If philosophy is an interpretation of experience, it has the great merit of giving consideration to all varieties of experience—not only to the sensuous, but to the ethical, aesthetic and religious as well. In synthesizing the head with the heart, it gives importance to all the deeper longings and higher aspirations of man.

It has always been a source of inspiration to the struggling man and is likely to have an ennobling effect upon the human mind.

(2) Differences among the idealists need not be too discouraging. In some important respects there is essential agreement among them. They all oppose mechanism, at least thorough-going mechanism, and believe that science is not telling the final story, although her conclusions are valid to a great extent. They all distinguish between appearance and reality and

relegate the world of common sense to a position of appearance. They all are inward-looking and discover the key to reality in our self-conscious. active self. They all regard man wih his higher values as central in the universe, and look upon the world as at bottom a goal-seeking and self-realizing movement of a great spirit. At any rate, differences of opinion are nothing peculiar to idealism.

(3) The principal arguments for idealism appear to be four: (a) Analysis of the cognitive situation shows that the conception of matter or anything which is neither mind nor idea is logically absurd. (b) Motion, change, purpose, unity and harmony of phenomena cannot be explained except by the hypothesis of a universal mind. All of these are but the essential features of our mental life, and the same must be true of the world at large. Inert matter, as bare extension or as something governed by mechanical laws, cannot possibly account for these and also for man's freedom and pursuit of values. (c) Unlike materialism, idealism believes in real qualitative differences and can give due importance to all types of our experiences. (d) Idealism is optimistic and progressive, and can alone serve man as an inspiring creed of noble and meaningful existence. It is alone a true philosophy of life and recognises a value and significance in our hazardous pursuit of ideals.

(4) Of these arguments, the first one defends subjectivism and is obviously unsatisfactory, as we have seen. The last one has no logical value, since the true and the good are not identical, nor invaribly connected. The second and the third argument have, however, great weight. Philosophy must not explain away the experiences of our spiritual life. And how can we explain them merely by the mechanistic categories of matter, force, causality, and the law of conservation?

But the idealist seems to go too far when he conceives the physical world as a mere externalisation or manifestation of the spirit. Words like 'externalisation' or 'manifestation' do not explain very much. A mind, in expressing itself as a physical structure, obviously, loses its very essence, its mindness. If the physical world were taken to be a 'creation' of the spirit, then the question would be: What is the nature of this creation? Has the world come 'out of' the spirit itself, or created by it out of something else? *In the first case, the world could not possibly be extended or have* any attribute inconsistent with spirituality. In the second case, idealism would lapse into dualism.

17. Conclusion

This brief survey of the ontological theories may be concluded with

certain hints as to a possible solution (tentative no doubt) of this most baffling of all philosophical problems.It seems that there is some truth in almost all these theories and their apparent contradictions can be resolved in a careful synthesis.

The most plausible view, as it appears, may be constructed from elements supplied by neutralism and evolutionism. Perhaps we can best conceive the world as made out of a single stuff more ultimate than mattar and mind but pregnant with the potentialities of both.(Considering from all relevant perspectives, we may perhaps most appropriately call it *divine*, if we like to name it.) The hierachy of the categories of matter, life and mind may be said to be results of the evolution of the original stuff which has an inner urge or necessity to evolve. Upto the level of the lower animals, the world is a singular structure in which the whole governs the parts. Individualism and real externality of relations appear at the level of higher life or mind. That men are independent entities, having individuality and freedom cannot be denied and can be explained only by the concept of emergence.

The world so conceived is at once monistic, dualistic and pluralistic. It is one insofar as all beings are contained in it– insofar as its basic stuff is qualitatively one, and its non-mental parts constitute one integrated system. It is dualistic, in the sense that at a certain level its elements fall into two broad divisions, physical and mental, of which the former is determined and mechanical while the latter is free and purposive. It is pluralistic, inamuch as it contains or is capable of a plurality of individuals, such as men. Such a world is at once matter, life and mind, both mechanical and teleological, both scientific and religious.

PART VI

ANTHROPOLOGY

CHAPTER XVIII

MAN'S ESSENCE : PROBLEM OF THE SOUL

1. Introduction

In this part of our inquiry, we shall withdraw our attention from the world at large and focus it on a very small but significant part thereof, viz., man. The philosopher will, as it were, look inward and study his own self. He will raise questions about the different aspects of his being and try to uncover his real nature, his real status, value and prospects.

On the one hand, the popular view about man is uncritical and largely determined by religion; on the other, man is studied by a number of sciences such as physiology and psychology. But, as usual, they study only different aspects of man. None of them studies man as a totality. Again, there are certain problems which are studied by no special sciences. There are, for instance, the problems of freedom of the will and immortality. Hence, as it is with the world at large, there must be a science to have a whole picture of man in which these latter problems will also find a place. Moreover, this synoptic and comprehensive science will try to get beyond all appearances, if any, and to unveil the real essence relating to every question it will investigate. This very science is anthropology, i.e., 'philosophical' anthropology—the philosophical study of man.

In the present chapter we shall ask about the essence of man. Is he only a body or a soul, or both? Is there anything like a soul? If so, what is it like?

2. Man in Experience

Man, in ordinary as well as scientific experience, is a very complex system—the most complex and the most marvelous ever known. The following are the salient features of this system :

(a) To an external observer, a man is only a body, capable of numerous types of movement. This body is made of countless living cells, and is animated and controlled by a complex and highly-developed nervous system with its centre in the brain. It starts its life in the form of a little embryo in the mother's womb and grows by assimilating food from its

environment. It lives so long as it retains this capacity for assimilation, and dies and perishes when this capacity is lost or the central circulatory or nervous system collapses.

(b) But to a man his own self appears to be something more than a mere body. The body is no doubt there. But he finds in himself peculiar capacities of consciousness, of perception and imagination, of thinking, feeling and willing—and, above all, of self-consciousness. All these capacities are ascribed to an incorporeal entity in him called **mind** or **soul.** He feels that he is not a mere aggregate of physical parts, nor a mere succession of mental states; he is rather a spiritual entity having a soul within his body as its essence and guiding principle. Corresponding to his physical aspect he has some crude biological needs and impulses; while corresponding to his spiritual aspect he has peculiar powers of rational judgment and valuative assessment. He has a sense of values and a boundless will to strive for their realisation. Besides, he has a social urge and sentiments of love and affection, of jealousy and hatred.

(c) Both the body and the soul appear to be substances, and diametrically opposed in character. The body is extended but cannot think, while the soul is unextended but capable of thinking. Again, while the body is determined by the soul or external conditions, the soul as such is free, a self-regulated spring of spontaneous activity. But the two seem to have mysterious powers of interaction. The will to move causes actual movement and, conversely, stimulations of sense-organs affect consciousness and will.

3. The popular view about Man

In the popular view, a full recognition is given to all these aspects of the human self. Man is considered to be a dual entity having both a body and a soul, and two types of states and activities, called physical and mental, are ascribed to them. It is believed that man has not gradually evolved out of matter, but was all at once shaped by God as His supreme creation (ashraf-ul-makhlukat). The body was first made from earth, and then the soul was breathed into the body. The soul is immortal, although the body perishes some day. The highest excellence of man consists in noble living and devotion to his Creator in accordance with the customary principles of religion.

The popular view emphasizes the distinction between body and soul, as well as that between man and the lower animals. Interaction between body and soul is not only considered possible, but taken to be a living fact. The body is, however, regarded as inferior, and all worth and excellence is

ascribed to the soul. The distinction between man and lower animals is said to consist in (a) man's peculiar physical features; (b) his excellent mental powers; and (c) his moral and religious beliefs and activities in which he comes close to God or even partakes of divinity.

4. Types of Theories about Man

What, then, is a man exactly? Is the man in experience the same as the man in reality? Different answers are possible. Following the popular view, we may say that he is both a body and a mind. This is the ***dualistic*** view of man, advocated, for instance, by Descartes. We may side with the materialist and say that mind or soul is not a separate spiritual entity, but only a function of the body. It is, in other words, no other than the brain and the nervous system in action. Or, we may side with the idealist and say that the mind is not only real, but the only primeval reality. The body is only a manifestation and externalisation of the mind itself. These two, the materialistic and the idealistic theories, may be contrasted with the previous one as the ***monistic*** view of the human self.

Supposing, however, that there is a mind or soul, what is its nature? Again, different answers are possible. That there are inner states such as pleasure, pain, anger and joy, and such processes as thinking, feeling and willing, cannot be doubted. We may suppose that underlying these states and processes there is a substance from which they emanate as its multifarious functions. Or, we may deny the existence of any such substance, and say that the mind is simply an aggregate of these states and processes, and so forth. Many of such possible hypotheses have, in fact, been advanced by scientists and philosophers; and consequently we have a good variety of theories of the soul.

[The soul and its faculties being the distinctive features of man, the problem of the essence of man is almost entirely a problem of the nature and existence of the soul. Hence in the next sections of this chapter we shall be concerned with different theories of the soul.

It is interesting to note that the great diversity of opinions on man is due to the too mysterious character of human nature. Man has known for certain numberless different things. But, curiously enough, he has faced probably the toughest hurdle in fathoming his own self.]

5. The substance-theory of Soul

This is the oldest, most popular and most common of all theories. Accoridng to it, the soul is a real entity, a substance, or a distinct and independent principle. The early Greek materialists conceived this substance as material. Heracleitus, for exmaple, maintained that the soul is a fiery vapour, and that the soul of no individual man is separate, but only

part of the universal soul-fire. Democritus, who maintained that everything is made of material atoms, said that the soul consists of smooth and round atoms and is 'exceptionally pure and refined fire'.

But the far more common view is that the soul-substance is something opposed to matter. It constitutes a separate and independent category. The soul of a man is a distinct entity residing in his body as the source of all his conscious activities, such as thinking, feeling and willing. Thus, on the one hand, it is 'spiritual' and has to be distinguished from his body. On the other, it is 'substantial' and must be distinguished from his mental states and processes. Rather, such states and processes 'belong' to it as its properties or functions.* It is one, while the states and processes are many; it is permanent and remains identical, while the latter are temporary, contingent and subject to constant change. In brief, it is the one unifying principle which underlies them as their source and substratum. It is that in us which thinks, feels and wills—which guides and governs our body. The body may perish some day, but the soul is immortal.

This view of soul as a substance is probably as old as human thought. This is current among primitive men, among ancient Greek and Indian thinkers. It was given a clear and elaborate form and a strong advocacy by Plato and Aristotle. It is upheld in medieval thought and in all great religions. In modern philosophy, it is very strongly defended by Descartes, Locke and Berkeley. Descartes, a dualist, clearly distinguished between matter and mind, and posited extension and thought, respectively, as their essential attributes. Locke argued that just as there is a material substance as the reservoir of sensible qualities, so also there is a spiritual substance as the agent of all mental operations. Berkeley went so far as to say that only the souls and their ideas are real, there being nothing like matter. While the notion of matter is superfluous and absurd, the existence of souls as active and perceiving substances remains indubitable and necessary. All objects of knowledge are ideas; and the soul is that which knows or produces these ideas, which wills, imagines and remembers them. It is an 'agent' very different from ideas and cannot even be respesented by them. "A spirit," he said, "is one simple, undivided and active being: as it perceives ideas it is called the *understanding*, and as it produces or otherwise operates about them it is called the *will*."[1]

This view of the soul has been upheld even by such renowned psychologists as William McDougall, and is also known as 'animism.' In

* Note the distinction between substance and quality. The soul is a substance, because it is a being, a self-existent entity and not a quality or bundle of qualities. It is substantiality plus spirituality.

a modified form it appears in, and is vigorously defended by such neo-scholastic philosophers as, for example, P. Coffey.

6. Comments

(1) This theory is apparently based upon a two-fold popular distinction: first, the distinction between physical and mental processes; and then, the distinction between substance and its qualities, or between agent and its functions. The supposition that lurks behind this theory is that, because mental processes are different from the physical, and because functions must be the functions of an agent, there must be a separate spiritual substance within our body. But the theory has been severely criticised. Hume argued (as we shall see in the next section) that we are not entitled to believe in a soul-substance, since we have no experience of anything like that. Mind is evidently only a bundle of fleeting mental states.

(2) Kant recognised the reality of the self, but argued that it is something unknown and unknowable. It is a 'noumenal self' or 'transcendental ego'. The self as the knower cannot itself be known. We cannot characterise this real self as a substance, since the category of substance is applicable only to appearances. The self that is known is only the 'me' and not the 'I'. In other words, it is only a system of the appearances of the real 'noumenal self'.

(3) The greatest difficulties about this theory arise from certain facts of body-mind relation. The so-called mental processes appear to be invariably connected with our nervous system. On the one hand, a severe injury to the brain will altogether do away with consciousness; on the other, there seems to be no postitive evidence in favour of the presence of the soul as an independent and distinct entity within our body. No doubt the hypothesis of the soul explains human behaviour up to a certain extent. But this distinction between body and soul also raises serious problems as to the relation between the two.

At any rate, in view of the evidences at hand, the substance-theory seems theoretically unsatisfactory. Of late, Prof. Ryle has characterised the soul as a myth, and criticised the substance theory as an absurdity based on a category-mistake.[2].

7. The Bundle-theory (Empirical view) of Soul

According to this view, the soul or the mind is not a simple spiritual substance, which remains identical amidst changing experiences; it is rather the experiences themselves. It is not an agent which underlies and 'possesses' mental states; it is instead the same as the states. David Hume

is a typical advocate of this view. As an empiricist, he rejects the substance-theory, because there is no empirical evidence to warrant it.

"There are some philosophers." he says, "who imagine we are every moment intimately conscious of what we call our Self; that we feel its existence and its continuance in existence; and are certain, beyond the evidence of a demonstration, both of its perfect identity and simplicity....For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception....The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations. There is properly no *simplicity* in it at one time, nor *identity* in different; whatever natural propension we may have to imagine that simplicity and identity."[3]

Thus, Hume reduces mind to a series of impressions and ideas, to a process of fleeting experiences. There is no mind, but only mental states and processes. Each individual mind is nothing but "a bundle or collection of different percepitons which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement."[4] The connecting strings which bind discrete perceptions into a bundle are the laws of association by resemblance, contiguity and succession (cause and effect). Our self and personal identity are nothing more than our experiences connected and organised by such laws.

Similar views have been expressed by many other great empiricists and psychologists. For example, according to J.S. Mill, "mind is nothing but the series of sensations and internal feelings as they actually occur, with the addition of possibilities of feelings." William James describes mind as a stream of consciousness. "The passing thought," he says, "is the only thinker". The mind, in the words of Pillsbury, is "the entire series of conscious states of an individual from birth to death". Again, 'What is a mind?' asks Bertrand Russell. "It is obvious," he answers, "that a mind must be a group of mental events, since we have already rejected the view that it is a single simple entity such as the ego was formerly supposed to be."[5] The bundle-theory is also known as the empirical view of self or as 'actualism'.

8. Comments

(1) Hume's theory stands upon his own empirical presuppositions, and is part and parcel of his general sceptical position. In a nut-shell, his

argument is that, experience being the only source of knowledge, our belief in self is warranted only if (a) there is an impression of the same, and (b) that impression is constant and invariable since the self 'is supposed to exist after that manner'. But neither are impressions permanent, nor is there any impression of the self. Hence, there is no self.

(2) But Hume's view has not been less attacked than the preceding one which he himself criticises. First of all, Hume's arguments are not accepted as conclusive. Introspection, to which he appeals, is no longer invariably in the good book of modern psychology (cf. Behaviourism). But, while to him introspection reveals only a series of states, to his critic it may directly reveal a simple and identical self; and each may find his opponent difficult to refute by any purely introspective means. As one could easily ask: What is the 'I' in him which 'enters most intimately' into himself, which 'stumbles' on perceptions and 'observes' nothing but perceptions?

Although Russell, in one place, assesses Hume as 'almost certainly correct', in another, he says that from Hume's premises it 'does not follow that there is no simple self; it only follows that we cannot know whether there is or not."[6] Hume's argument virtually rests upon his phenomenalism, viz., that our impressions and ideas are the only objects that we know and the only materials that constitute the known world. But phenomenalism is hardly a satisfactory position.

(3) It is argued that we can explain consciousness, memory, anticipation, knowledge and even our own personal identity only by a mind which is a permanent thinking principle and not a mere collection of states. Consciousness implies some 'being' which is conscious. Memory and anticipation involve relating the past and the future with the present. Mental states, being a flux, are materials to be connected—but could they be connected by themselves?

Mill says that mental states can know each other and that a series of feelings is aware of itself as past and future. But he himself admits that here "we are face to face with a final inexplicability"; that is, he cannot explain how such awareness is possible. Kant argued that knowing has a necessary reference to a permanent self as an apperceiving and unifying principle. It is the same "I" which sees and hears, perceives and understands. But this I, being the observer, cannot itself be observed.

(4) Hume's account of personal identity leads him to the conclusion that we may be said not to exist when we have no perceptions—e.g., during sleep. This implies that we are dying and returning into being every day. This is absurd and necessarily affects our moral and social responsibilities. In fact, Hume is, in his own confession, himself embarrassed by his

conclusions. His own exposition of his views involves the use of phrases which show that he cannot himself get rid of the presupposition of a permanent self. He speaks of 'imagination', 'understanding', 'mind' and 'acts of mind'. The idea of identity, according to him, is a fiction which arises from the resemblance between the transition of imagination from one idea to another and the act by which we contemplate one continued object. Both of these are, in his language, 'acts of the mind'. In a word, Hume's scepticism is logically impossible, because he destroys the sceptic.[7]

9. The Synthetic or Organic view of Self

This veiw is a synthesis of the other two explained above and is perhaps better than each. According to it, the above theories are one-sided and involve illegitimate abstractions. The soul or the mind is neither a simple abiding substance apart from mental processes, nor a mere bundle or aggregate of such processes. It is virtually a synthesis of the two. It is a single spiritual principle, as manifest in mental operations. It is, in other words, the organised whole of mental states and processes, bound together by a central principle of unity. Thus it is neither an abstract unity or identity (a single substance), nor an abstract plurality or difference (many different mental states); but rather a unity-in-plurality or identity-in-difference.

This is the view of the idealists—of Hegel and his followers. It recognises the role of the neuro-muscular system of our body in our mental life. But it emphasizes the presence of a non-material principle, of a conscious subject, as the real source of mental operations and as the ground of their unity and organisation. Thought cannot be classed as a special type of bodily phenomenon. Rather the body itself is only a manifestation and finite reproduction of an eternal univeral spirit. But the mind must not be conceived apart from its functions.

"Mind or spirit", says John Caird, "cannot be thought... as an identity prior to all differences, for its very life and being is *in* differences. It is not a unity behind differences, but it is a unity *in* differences, and of differences."[8] In a similar voice Green says: "Just as we hold that our desires, feelings and thoughts would not be what they are, if not related to a *subject* which distinguished itself from each and all of them; so we hold that this subject would not be what it is, if it were not related to the particular feelings, desires and thoughts, which it thus distinguishes from and presents to itself."[9]

10. The Materialistic view of Mind

Materialism denies the existence of mind as a separate nonphysical principle. Matter is, according to it, the only stuff of the world. Hence it tries to reduce mind to matter—that is, to explain mind in terms of matter. Man is considered to be a mechanism, governed by physical laws, like other things. This explanation, however, assumes various forms; and accordingly, we have different versions of the materialistic view.

'Attributive materialism', said Kulpe, makes mind an attribute of matter; 'causal materialism' makes it an effect of matter; 'equative materialism' looks upon mental processes as really material in character. Again, Büchner mentions three types of materialism in his work, *Force and Matter*: (a) Thought *is* motion, (b) Thought is the *effect* of motion, and (c) Thought is indissolubly *connected* with motion.

1. Equative view : It denies all distinctions between mind and body, and equates the former with the latter. In a crude form it appears in the views of the Indian Carvakas, the early Greek Atomists and the Epicureans. Democritus said that the soul is, like any physical object, made of atoms; only, these atoms are of a finer, smoother and rounder type. Similarly, Thomas Hobbes (1588-1679) maintained that all that exists is body, and all that occurs is motion. Mind is conceived by him as a refined body, an internal substance in the head, or motions in the brain. Sensations and feelings are only cerebral motions, while memory is the lingering effects or residuary traces of perceptions.

2. Causal view : In it mental processes are distinguished from physical processes, but made dependent on the latter as their effects. Some eighteenth-century thinkers, such as Holbach, Cabanis and La Mettrie, are advocates of this position. In Holbach's view, thought is only a function of the brain. According to Cabanis, thought is a function of the brain just as digestion is a function of the stomach; or a secretion of the brain as bile is a secretion of the liver. La Mettrie regards matter as the only fundamental stuff, and mental processes as effects of nervous or cerebral processes. Later on, Haeckel (1834-1919) also explained mind as a function of the brain and regarded psychology as only a branch of physiology or biology.

3. Attributive view or Epiphenomenalism : Accoridng to this view, mind is not a distinct element in our cerebral processes, but only a *quality* of them. Consciousness is not a fundamental property of matter, but only a secondary or derivative property, which matter acquires in virtue of a certain peculiarly complex arrangement of its particles. It arises along with that arrangement and disappears as the arrangement breaks up. Mind is thus only an epiphenomenon, a name given to certain phenomena that

merely accompany cerebral processes.

The word 'epiphenomenon' (epi=upon or after + phainomenon= appearance), first coined and used by T. H. Huxley, literally means 'appearance-upon' or after-phenomenon, a by-product of a basic process, which accompanies the latter but remains outside the causal chain. Thus mental processes are like an aura of cerebral processes, or comparable to flashes of light thrown out by frictions in a grinding machine. They have no other significance, and are without any function or effect upon the cerebral processes. Such is the opinion, for example, of Huxley, Clifford and Hodgson. Epiphenomenalism is also known as the 'phosphorescent theory' of consciousness.

4) To these views may be added a fourth one which may be called the 'emergent view'. Certain modern evolutionists (e.g., Lloyd Morgan) maintain that matter is the only ultimate stuff of things. Mind must have evolved out of matter, but nevertheless it is not to be identified with matter. Mind is such a distinctly organised form of matter that it constitutes a fresh category with its own laws. Materialism of this type is better known as naturalism, and must be distinguished from the other extreme types.

11. Comments*

Thus, the materialistic view (except for its emergent form) is that man is merely a more developed form of matter, and psychology is only an extension of biology, while biology is only an extension of physics and chemistry. This view is also known as 'automatism' insofar as it regards man as only a more complex automation or machine; while in psychology it appears in the form of behaviourism. However, materialism in its traditional extreme forms, in which it flatly reduces mind to matter in motion, has never gone unopposed.

(1) It is obvious that the materialistic view of mind stands or falls with the general materialistic position. Belief in gross inert matter has not only been attacked in all ages, but has been completely exploded by modern nuclear physics. Atoms are no longer the ultimate constituents of matter, far from being the stuff of mind.

(2) But materialism in its later and more developed forms has some great advantages. It can explain the unity and continuity of mental life and also our personal identity, by ascribing mental processes to a single substantial organ, viz., the nervous system. In that respect it shares the advantage of the substance-theory and is superior to the bundle-theory of the empiricists. But it has been alleged to be incapable of explaining the

* Much of it is already done in connection with our treatment of materialism (Vide-Chapter XVI).

most unique aspect of mental processes, namely, consciousness. It is argued that the motion of material particles and such conscious processes as thinking and feeling are, by their very definition, so obviously different that one cannot be described as a form of the other. Lotze observes that the attempt to find mind's capacity for knowing itself (self-knowledge) as an identical subject in the numerical unity of a hard and dead atom "is not a process of reasoning which merely fails to reach an admissible aim—it has no aim at all."

(3) Epiphenomenalism has been attacked on the grounds of the important role which intelligence plays in man's behaviour and the obvious facts of mental processes affecting the barely physical.* According to some, the psychologists' distinction between psychoses and neuroses, between functional and structural disorders, and the possibility of the psycho-analytic treatment of psychoses as mental (and not neural) disorders strengthens the belief in mind as a distinct entity.

From another perspective, Alexander rejects epiphenomenalism, first, because "it supposes something to exist in nature which has nothing to do," and, secondly, because "it is false to empirical facts." Neural processes which are also mental are of a special character; and the mental element (consciousness or thought) is essential to them in the sense that they lose their neural character when the mental element disappears and vice versa. "Epiphenomenalism" says Alexander, "is a mere fallacy of observation."[10]

(4) Besides consciousness, it is considered difficult to reconcile certain other features of our mental life with materialism. Materialism involves mechanism, and excludes teleology which seems to be a most common and distinct feature of human behaviour. Moreover, mind is conscious of values and capable of value-judgments. Above all, mind is conscious of itself as a *mind*. It is quite difficult, if not impossible, to explain these facts in terms of bare matter and motion. Often materialism, without explaining, has explained them away, which is quite unjustifed. In fact, because of its inherent weaknesses, and in view of up-to-date scientific findings, materialism has given way to naturalism. Naturalism, particularly of the type wedded to emergent evolution, is more liberal and probably the nearest to truth.

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* "Never, surely, did a sillier or more self-stultifying idea enter the human mind, than the idea that thinking as such—that is to say, remembering, planning, reasoning, forecasting—is a vast irrelevancy, having no part in the causation of man's behaviour or in the shaping of his fortunes—a mysterious redundancy in a cosmos which would follow precisely the same course without it. Nobody at a moment of reflective action, it may be suspected, ever believed this to be true."

12. The Behaviouristic Theory of Mind

This is closely allied to the view already considered. Behaviourism is virtually an extension of materialism (or, better say, naturalism) to the field of psychology. It was founded by J.B. Watson, an American psychologist, about the beginning of the present century, and has already drawn a large number of followers, such as Hunter, Lashley, Tolman and Skinner. It absorbs the trial-and-error principle of Thorndike as well as the notion of conditioned reflex introduced by Pavlov.

Its fundamental thesis is that psychology is a study of *behaviour*, not of mind or consciousness. Man is only a complex physiological system capable of being affected by and affecting the environment. In the behaviourist's terminology, man is an organism which behaves by responding to stimuli. The behaviourist carefully avoids all references to mind or consciousness. What goes by the name 'mind' is nothing other than the highly developed and highly sensitive nervous system in the human body; and its only mode of operation is sitimulus-response (S-R). The mental life of a man is merely a system of mechanical responses in which purpose and insight have no role. Thinking is subvocal talking; emotion is implicit visceral reactions; and all learning is a matter of conditioned reflexes.

This calls for some remarks, as follows.

(1) It should be obvious that behaviourism is only psychological naturalism, or the psychological counterpart of naturalistic metaphysics. It arises in opposition to introspectionism and, unlike older theories, does not base psychology upon the notion of soul or mind. In its metaphysical bearings, it is subject to most of the criticisms levelled against mechanism and materialism.

(2) Of course, as a psychological theory, its aim and method may differ from those of the 'philosophy' of mind. For example, it may (as it does) ignore the fact of 'consciousness' and the age-old problem of the relation between body and mind. But, *ipso facto*, it must leave scope for a philosophy of mind. Even a behaviourist recognises the facts of organisation and adaptivity in behaviour which are left to such a philosophy for their explanation. But, even as a psychological theory, it has vigorous opponents. The hormic psychology, so powerfully represented by McDougall, emphasizes the role of purpose in behaviour, while the Gestalt school recognises the play of insight in learning.

13. The Emergence Theory of Mind

According to this view, mind exists as a distinct entity, but is at the

same time continuous with matter or the lower types of being. This has been advocated by the emergent evolutionists and naturalists, such as Morgan, Alexander and Sellars. It cuts a middle ground between materialism, neutralism, idealism, behaviourism and the dualistic substance-theory. Mind is neither a mere function of the brain or a system of barely neural responses, nor a distinct spiritual entity, a ghost within the body. It is the nervous system itself, but a system of a unique character. Consciousness is the most essential factor in mentality, and it appears when the nervous processes attain a certain degree of complexity through a highly developed organisation of the basic elements of the body. Life emerges out of matter when the material particles come to have a certain organisation; similarly mind emerges out of life when the vital processes attain a higher type of organisation.

Mental processes are thus the same as the neural processes. "But while a mental process is *also* neural, it is not merely *neural*, and therefore also not merely vital. For, that mind should emerge, there is required a constellation of neural or other vital conditions not found in vital actions which are not mental.... Mind is thus at once new and old."[11] It is old because it can be resolved into psysiological terms; that is, the elements of psychoses are only neuroses. It is new, because the neuroses are of such a specific character that they separate themselves from simpler vital processes, so as to constitute a fresh category. To this specific character or the specific organisation of elements is due not only consciousness but also those peculiar types of action and laws of behaviour which are distinguished as mental. A man's mental processes are neural when 'contemplated' or observed by somebody else, but they are also conscious when 'enjoyed' by the man himself.

14. Comments

(1) This theory shares the limitations of the general theory of emergence, already indicated (Chapter XIV). Apart from that, it seems to be highly agreeable both to reason and experience. It is synthetic in attitude and seeks to have a balanced view of things. Unlike behaviourism, it avoids the mistake of giving no recognition to the conscious aspect of mental processes. It introduces a modified form of parallelism which seems to be quite in harmony with the facts.

The same mental processes have both a neural and a conscious aspect; they have a low origin, and yet they are in themselves of a higher order. Thus, this theory, in spite of its fullest sympathy for matter, tries to give a distinct status to mind and, through that, to man and his values. It is

naturalism. but higher naturalism, in the words of Pringle-Pattison.[12]

(2) It regards mind as the directing and controlling factor in man. Far from being a mere epiphenomenon, it is the highest emergent so far, the most developed of all reals. Mental processes are responses to objects; so that, in another sense, mind is but a system of acts or conations. But these responses are not merely adaptive but also evaluative or appreciative of values. According to Alexander, divinity is only one step beyond mentality; that is, deity is the emergent next to mind. Thus mind is virtually made a spirit and restored to its unique status and peculiar functions of which it is deprived by extreme materialism.

15. Other Theories of Mind

There are some other ways mind has been conceived both in philosophy and psychology. In philosophy, the double-aspect theory was advanced by Spinoza, maintaining that body and mind are only two attributes or aspects of one identical substance. In a modified form it appears, among others, in Warren and Fechner. Kant's theory of noumenal self has already been referred to. The neo-realists have expounded a theory which combines in a way behaviourism and epiphenomenalism. Mind is the nervous system responding to the enviornment according to biological needs. "So far as we actually know," says Durant Drake, "consciousness occurs only when brains function."[13] The pragmatists deny the existence of any distinct psychic entity, and defines mind as the system of purposive and reflective acts of adaptation serving the needs of life, Mind is simply the thinking apparatus in human organism of solving practical problems.

In psychology, McDougall advances a bold and strenuous vindication of the dualistic animism of Plato and Descartes, preferring the word 'thing' to 'substance'. The soul is, according to him, "a being that possesses, or is, the sum of definite capacities for psychical activity and pyscho-physical interaction." It is sui generis, unitary, individual and purposive. Freud and his followers have discovered and stressed the unconscious aspects of mind, while the Gestalt school has presented an anti-mechanistic conception of mind and its behaviour.

16. Conclusion

How shall we choose from among this large variety of theories? Here again, as everywhere, a strict unanimity among the beginners is neither possible, nor probably necessary. Our choice will be purely provisional, but strictly in conformity with the obvious facts.

On the ond hand, we must keep in mind the facts of experience about

human nature (considered in the second section of this chapter), and try to explain them, without explaining them away. On the other, we must take serious notice of the scientific findings on the close relation between bodily and mental processes. The most agreeable key to a harmony of them seems to lie in the concept of emergence. That mind has evolved out of a lower origin and is yet possessed of superior qualities and capacities is not only conceivable but seems to be in the best harmony with the facts that we can claim to know. But, as we have seen, it cannot be said to have emerged from a stuff which is matter in the traditional sense (cf. Conclusion of Part III). Apparently, problems will arise as to freedom and immortality. We shall, however, consider them in their proper places.

CHAPTER XIX

BODY AND MIND

1. The Problem stated

Our next concern is the problem of the relation between body and mind. The problem has two aspects, of which one relates to their essential nature, while the other concerns their possible causal connection. In the first aspect, our question is : Are body and mind essentially identical or different in nature? In other words, are they made of the same stuff or the same reality viewed from different standpoints? In the second aspect, our question is : If they are different entities, or even different aspects or attributes of the same reality, how exactly are they related? Do they exist independently, or affect each other? If they affect each other, how is that possible?

The first aspect of the problem is already considered in the previous chapter. We shall now be concerned with the second aspect.

Obviously, this aspect of the problem arises only out of a certain type of answers to the first, viz., the 'dualistic' type which claims that body and mind are two distinct entities or two independent aspects or modes of the same substance. Historically, this is one of the most hotly-debated question and different answers have been offered from time to time — such as interactionism, occasionalism, and so forth. Let us consider them one by one.[1]

2. Interactionism

According to this view, body and mind are distinct entities, and yet they are capable of acting upon each other. Descartes, as we have seen, sharply distinguishes between body and mind. The essence of body is extension, while that of mind is thought. The body is absolutely a mechanical structure governed by physical laws and animated by what he calls 'animal spirits', while the mind is a free purposive spiritual principle having separate laws of its own. Body and mind are combined by God so as to produce a substantial unity, but they are not 'mixed' together.

Nevertheless, says Descartes, they can affect each other and determine their courses mutually. This is possible through the pineal gland situated in the brain. The mind is joined to the whole body, but has its principal seat in that gland. Motions produced in the sense-organs are transmitted by nerves to the pineal gland, and thereby sensations are produced. On the other hand, the soul also can move the pineal gland in various ways, and these motions, being conducted by animal spirits to the muscles, produce muscular movements. Such appetites as hunger and thirst, emotions and passions, feelings of pain and pleasure and sensations of such qualities as colour, taste and smell are the results of the intimate union between body and mind.

Although Descartes' account of the mechanism of interaction was rejected even by his immediate followers, interactionism itself is the most familiar and most widely held of all theories of the body-mind relation. In recent years it has been defended, for example, by such biologists as Hans Driesch, such psychologists as William McDougall, and such philosophers as W.H. Sheldon.

3. Arguments for and against Interactionism

Interactionism has been a matter of great controversy, and different arguments have been offered for and against it.

(1) Many thinkers, including Descartes' immediate successors, such as Geulincx and Malebranche, have argued that interaction is impossible, since body and mind are so sharply opposed to each other. Descartes himself presented body and mind as two 'closed systems'. Causal interaction is possible only between commensurables or factors alike in character. A physical motion in our brain may produce another physical motion in our muscles. Similarly, a mental process may cause another mental process, as when the thought of a rose may excite the thought of its fragrance. But causality between such utterly different things as body and mind is simply *inconceivable.* "It is much as if we were asked to comprehend how an image of fire could set the coal on the hearth burning."[2]

(2) But this argument is of no great moment. First of all, inconceivability is itself no argument at all. As Cunningham rightly points out, a hypothesis is inconceivable, if it is arbitrary or lacks contact with the main body of knowledge; or if its affirmation involves a greater contradiction of the main body of knowledge than its denial; or if it is self-contradictory. The hypothesis of interaction is inconceivable in neither of these senses. Secondly, to assume *a priori* that interaction between body

and mind or between incommensurables is impossible is to commit the fallacy of *petitio principii*. There is no apparent 'necessity' about that assumption. Thirdly, many things which were once considered inconceivable have eventually turned out to be facts. The roundness and diurnal revolution of the earth, for example, were once considered inconceivable. Fourthly, the causal interaction between bodies is no less inconceivable or mysterious than that between body and mind.

The gravitational attraction between bodies or the action of external stimuli upon sense-organs is prima facie equally incomprehensible. Yet nobody can possibly deny them.

"Is it so certain," asks Prof. Pratt, "that dissimilar things must fail to influence each other? Whether they can do so must be settled not by an appeal to the imagination but by an appeal to experience. Our inability to answer the question, How can the sun attract the earth, is not generally held to make it imposible for the sun actually to do so. Prior to appeal to experience, the *a priori* denial of the possibility of such causal relation (mind and body) is pure dogma."[3]

(3) It is further argued that interactionism involves a violation of the principle of the conservation of energy. The principle demands that the total amount of potential and kinetic energy in the world is constant; there is no increase or decrease but only transformation of energy. Now, if the mind acts upon the body (when, for example, an act of volition causes the 'movement' of my hand) there is an increase in energy. Conversely, if the body acts upon the mind (when, for example, the stimulation of my eyes by light causes the 'sensation' of colour) there is decrease in energy. Here the movement of my hand is a physical event, while the sensation is a mental event. In the former, some physical energy is created; in the latter, some physical energy is destroyed.

(4) But to this argument also the interactionist has his answer. First of all, a causal connection does not necesarily involve a transference of energy, but only a simple relation of dependence. Here, again, the non-interactionist seems to beg the question.

Secondly, his argument seems to rest upon a confused or vacillating notion of energy. But whether we regard mental energy as identical with or different from physical energy, in neither case does interaction involve a violation of the conservation principle. In the former case, we may include mental energy in the total quantity of natural energy; and then interaction will simply mean a mutual transformation of energy. In the latter case, mental energy, being altogether different in kind, may simply effect a transformation of physical energy, without itself being transformed

into the latter. In each case the total quantity of energy remains unaltered.

Finally, the law of conservation has its own limitations. It is an induction and therefore only highly probable, at the best. Further, it is a hypothesis of physical science, and may be quite true of physical facts; but it may not apply to organic and mental phenomena. In fact, says McDougall, it has no bearing upon the problem of interaction. Experimental facts, as Sheldon argues, do not show that interaction is impossible. Conservation is proved only of closed systems; but it does not exclude interference from outside.

What follows from a consideration of these arguments and counter-arguments is that interactionism has a good case. Of course, Descartes' suggestion that interaction is effected through the pineal gland is absurd. But apart from that, interactionism is better than the other rival hypotheses. Assuming that body and mind are two different entities, there is, first of all, no reason why interaction between them will not be possible; and secondly, there is ample empirical evidence for it. Of course, the exact mechanism of interaction is not known, but that does not mean that interaction is not or cannot be a fact.

4. Occasionalism

This theory took its rise from difficulties felt in the Cartesian doctrine of interactionism. It was propounded by Descartes' immediate successors—Geulincx, Malebranche and others, who accepted their master's dualism of body and mind but rejected his account of the causal connection between the two. They said that body and mind, being unlike in kind, cannot possibly act upon each other. The apparent interaction is virtually a case of correspondence or parallel occurrence, which is effected by God. Through the constant interference of God mental events correspond to bodily events, and vice versa. When, for example, I will to raise my hand, God intervenes and does the actual raising. Conversely, when there is a flash of light, God interferes and causes the sensation of light. Here the mental event of willing and the physical event of the flash are each a mere 'occasion' for the corresponding events. Mental and physical events are thus no real causes but only occasional causes *(causae occasionales)* for corresponding events.

Geulincx based his position on the principle that I am not the cause of an event unless I know how it happens. Since I do not know how my will is followed by a movement of my body, or how a motion in my sense-organ is followed by a sensation, there must be a third intervening cause for these sequences. "If God had destroyed the created world," said

Malebranche, "and would continue to affect me as he now affects me, I should continue to see what I now see; and I should believe that this (created) world exists, since it is not this world that acts on my mind."

5. Comments

(1) Occasionalism, as generally understood, is certainly no advancement upon interactionism. It rests upon the assumption that causal interaction is possible only between things of similar nature. But (as we have already seen) this assumption has not been proved. Rather, mind-body interaction is a glaring fact of experience.

(2) Occasionalism seems to be ill-considered, if not quite inconsistent. If God, being a spirit, can act upon matter, it is not understood why mind should not. It is not obvious that the finitude of minds and bodies necessarily incapacitates them for interaction.

(3) Occasionalism rests upon another presupposition—namely, God. But that there is a God and that interaction is possible between God and matter remains to be proved.

(4) Further, occasionalism reduces every case of correspondence between matter and mind to a sort of miracle. It is in fact further away from science than interactionism. God is also virtually reduced to a sort of *deus ex machina*. The function assigned to God does not seem to suit His godhead.

(5) It must, however, be noted that this theory becomes significant and shakes off much of its apparent absurdity, if it is understood differently. Divine interference need not mean 'personal' interference of God. If it is taken to mean that God has imposed such laws on motion as make it harmonious with the soul's volitions, then occasionalism becomes highly agreeable; since the operation of a natural law may be viewed, through a simple change of vocabulary, as divine activity. In fact, there are passages in Geulincx which point to such an interpretation. But, so understood, occasionalism approaches or paves the way for parallelism or Leibniz's theory of pre-established harmony.

6. Parallelism

According to parallelism, body and mind do not interact, either independently or through divine intervention. They simply correspond to each other. They are like two parallel straight lines which run along but never touch each other. This view was strongly advocated by two great philosophers of the early modern period, namely, Spinoza and Leibniz. Even the occasionalists are parallelists of a certain type. Of late, this has appeared in

different forms among a large body of philosophers and psychologists.

In its general form, this theory maintains that there is a bodily process corresponding to every mental process or a brain-event corresponding to each mental event, and vice versa. As it is otherwise put, to every psychosis there is a corresponding neurosis, and conversely; but none causes or affects the other. Spinoza said that matter and mind, or extension and thought, are no ultimate substances but only two attributes of a more ultimate substance which is neutral in character. Our body and mind are thus two aspects of one ultimate reality. They do not act upon, but only run parallel to each other. To every unit of extension in the world there is a corresponding unit of thought. Similarly, to every change in our body there is a corresponding change in our mind, and vice versa. 'The order and connection of ideas', said Spinoza, 'is the same as the order and connection of things.'

Leibniz held that the world is made of spiritual atoms which he called monads. Monads are of a higher or lower order. Our body is made of monads of a lower, unconscious kind; but our mind is a 'spirit'—a monad of a higher order having reason and self-consciousness. Monads, however, being windowless, they cannot affect or influence one another. Yet there is perfect correspondence and synchronism among them. This is due to a universal harmony pre-established by God.

If two clocks continue to keep exactly the same time, a lay observer may be led to believe that there is some sort of interaction between them. But their parallel running may be entirely due to their correct mechanism and perfect adjustment. Such is the case with our body and mind—indeed, with any two monads. After creating the monads, God so adjusted them that they are running and will ever run in perfect harmony. This is the well-known theory of pre-established harmony propounded by Leibniz.

Freidrich Paulsen (1846-1908), another advocate of this theory, compares the skull of a man to a mill whose movements constitute a causal series. These movements alone are observable to a physiologist. But it is quite conceivable that alongside of this physical series there is another series, i.e., the mental series of perceptions, ideas and feelings; and that these two series run along without mutual interference. The physiologist can be aware of the second series only within himself.

In psychology, parallelism appears in a modified form in the theory known as *psycho-physical parallelism*, advocated, for example, by G.F. Stout. A still more modified form of it is the double-aspect theory advocated by Howard Warren. This theory does not recognise body and mind as distinct 'entities' but only as two distinct 'aspects' of the same

entity. Warren says that neural occurrences and mental experiences are only two ways of looking at the same set of facts.[4]

7. Arguments for and against Parallelism

The theory of parallelism has two aspects: that there are brain-events corresponding to mental states, and conversely; and that causal connection holds only among brain-events or among mental states, but not between brain-events and mental states. As to the first aspect, there are philosophers who insist that brain-events correspond to each mental state, but not all brain-events are accompanied by mental states. The current scientific trend is the belief that conscious processes are invariably grounded in cerebral functions.

As to the other aspect, there are facts of experience— e.g., reflex acts, habitual acts like walking, reveries or day-dreams, continuous reflection—which lend support to parallelism (cf. Cunnigham). When, for example, we jerk away our finger from a hot object, a brain-event caused by the stimulus of heat immediately produces another brain-event leading to the finger's sudden movement; there is no role of mind in the process. Again, in day-dreaming, one idea or image follows another without any apparent stimulation or interference from the side of the body.

But is parallelism really a fact, or justified in its entire claim?

(1) Certain objections have been raised against this theory. Parallelism cannot explain sudden and irrelevant experiences. For example, a man is interrupted in his meditation by the sound of a bell (or a sudden knock at the door). The perception of the sound is a mental state. It cannot be produced by any other mental state in his series of thoughts, since it comes as an 'interruption' and is, therefore, obviously repugnant to the series. Paulsen contends that it is caused by some previous but unknown mental process. But such an explanation of the known by the unknown is surely unsatisfactory. It is simpler and better to say, following the interactionist, that the perception of the sound is due to the action of a physical stimulus upon the mind.

(2) It is argued that parallelism renders either body or mind useless. If the body can work without a mind, the mind becomes superfluous and inconsistent with the principle that in biological evolution that alone survives which is serviceable to the organism's struggle for existence. Again, if the mind could function without a body, it is not understood why a body clings to it.

The point of inconsistency is, however, very weak. That utility is the only guarantee of survival in every case is a mere assumption. Evolution

has, apparently, produced many things that are useless. But the other side of the objection is quite strong. The only way the parallelist can meet that objection is to say that the body is only an appearance (idealism). But this saps the very foundation of parallelism.

(3) It is further argued that parallelism involves panpsychism and determinism. Spinoza and Paulsen are indeed panpsychists. But panpsychism is a doubtful position. It is presumptuous to think that there is a mental aspect in every particle of matter. Mind, as generally understood, seems to be a unique possession of higher animals. Again, because physical processes are mechanical and determined, their corresponding mental processes also must be so; otherwise, their correspondence becomes impossible. As William Hocking beautifully puts it, "if the physical finger in obedience to physical laws pulls a physical trigger, it is not evident how the mental event corresponding to this can be other than a will to shoot!"[5] In fact, Spinoza argued for a thorough-going determinism. But thorough-going determinism is inconsistent with the facts and renders morality or any form of responsibility impossible.

8. Conclusion

This brief consideration of the above theories suggests that none of them is quite satisfactory. Interactionism is in itself quite agreeable and seems to be warranted by the facts; but its dualistic background is doubtful. Mind and body are not perhaps two absolutely separate substances somehow joined by God. To this extent the mind-body problem appears to be a pseudo-problem. Occasionalism loses its significance if this dualism disappears, since it arises from an attempt to reconcile the apparent correspondence between body and mind with this dualism.

The same applies to parallelism in its early stage. Leibniz's view rests upon his thesis that monads are windowless and cannot affect one another. This is only creating a problem which begets another problem when he brings in God and pre-established harmony to solve it. God is Himself a hypothesis, and the pre-established harmony seems to be a miracle and is hardly an explanation. Again, in resolving the dualism of 'substances', that is, the dualism of body and mind, Spinoza only creates a fresh dualism of attributes.

In the present context, then, interactionism is the best available hypothesis. Mind and body can and do interact, but not as two utterly different substances. The mind is not a separate entity within the body. It is only a specially developed part of the body itself (cf. the conclusion of the previous chapter).

CHAPTER XX

FREEDOM OF THE WILL

1. The Problem Stated

The problem of freedom of the will is another most important and interesting problem about man. As we have already seen, in ordinary experience, we find ourselves to be both physical and mental, and while the body is subject to physical laws, the mind is a source of spontaneous and free activity. But are we 'really' free?

We are no doubt free in the ordinary sense of the term. If by freedom is meant political, social or economic freedom, most of us, if not all, are free. Besides, a few of us seem to have what may be called spiritual freedom. Our country fought for political freedom, and she is now free. But the freedom in question is of a quite different order. It is traditionally known as freedom 'of the will'. In order to distinguish it from the other types of freedom, we may call it *volitional* or *natural* freedom, if we like.

The question is : Are we free from the necessity and uniformity of causal laws, from mechanical determination by antecedents? Science believes in strict causal determinism. Each event is invariably due to certain antecedent conditions; the world is like a gigantic machine perfectly governed by causal principles. Nothing happens by chance, and everything can be predicted from a study of the present conditions. Thus uniform causal determination and predictability are the very corner-stone of the scientific view of the world. But is there no exception? Is not man in any way a gap in the universal causal nexus? Is there no power in him by which he can escape the causal chain, choose between alternatives and himself initiate new changes?

Apparently, we are free to do what we choose or will to do. We choose to speak and we speak. We will to walk and we walk. External circumstances may stand in the way of the execution of our will, but that is beside the point. Our problem relates to the choice or the will itself. If our will determines our action, what determines our will? Is it mechanically determined by antecedent conditions like any ordinary physical event?

If so, that will imply that there is nothing like chance, novelty, possibility or creativity in man's life, and that man cannot be held responsible, praised or blamed, for his actions. It is because of this great practical bearing that the problem has always excited immense speculative interest. Again, it poses a great dilemma which is not easy to rebut. Science demands unrestricted and universal reign of causality. This is one of the horns of the dilemma. The other horn is the demand (at least) of morals that duty necessarily presupposes freedom of choice. It is for this reason that the problem has been the platform of a very long and hot controversy.

2. Fatalism

Fatalism is one of the answers to the question whether the human will is free. It denies freedom altogether and emphasizes that the world is a perfect causal system in which each future event is strictly pre-determined. What will happen will happen; nothing can interfere with this necessity. A human individual is only a cog in the cosmic machine, his will and actions being thoroughly determined by *external* natural forces. This view may also be called 'hard determinism' in the language of William James.

But fatalism is more particularly a theological doctrine and a popular belief in which God alone is really free and all events, including human volitions, strictly follow from His omnipotent will. We hear people say that a man is born with his fate sealed up once for all and, however may he struggle, he cannot escape it.* This is the sense in which the word 'fate' is usually taken. It means inevitable destiny or appointed lot. This popular belief in fate relates specially to death. Ordinary people believe that the hour, the place and the manner of a man's death are inescapably determined even long before his birth. Quacks sometimes explain their failures by saying that the treatment was appropriate, but the patient's hour had come.[1] Popular beliefs in the stars and the common phenomena of astrology and palmistry are all fatalistic.

There have been theological schools upholding fatalism. The Indian belief in 'daiva' (fate) and the Islamic doctrine of 'taqdir' (fate) are quite familiar. In the West, the Calvinists advocated a sort of fatalism in which

* "Fatalism is a doctrine, not of the will, but of future events; it holds that, by one route or another, a certain definite end will surely be attained. Whatever you do, whichever way you will, it cannot affect the outcome, you are caught in a net; you may struggle, but you cannot escape your destiny. You are like a poor chess-player pitted against an expert: you may move this piece or that for a while, but you are bound to be beaten. Or, looking on the optimistic side, no matter what mistakes you make, you cannot hurt yourself; you will meet with no ill that you are not fated to meet anyway; you will not die, however brave you are in battle, until your hour has come."
(D. Drake, *Invitation*, p.397)

God was made the source and centre of all events, and man utterly dependent upon him. In the history of early Muslim thought, there was a hot debate between the Jabrites and the Qadrites, in which the former altogether denied human freedom. They maintained that every event or every action proceeds invariably from a divine decree. To be consistent, they made God a participant even in the sinful acts of man.[2]

3. Comments

(a) Fatalism has never been important and influential in philosophy, but has remained almost entirely a popular or theological dogma. It is too obvious to deny that in man's decisions his own organism, his own character has a definite role. Denial of freedom can at most assume the form of causal determinism in nature or of self-determinism, but not fatalism. It is an extreme view, insufficiently thought out, and is opposed to the facts of ordinary experience.

(b) Theological fatalism arises as a defence of divine perfection. It is argued that the existence of free, finite selves necessarily takes away from the omnipotence of God. But this argument is not generally accepted. It overlooks the other side of the picture, viz., the emphasis of religion on man's responsibility, a denial of which curtails divine justice. Further, if man's freedom be a fact, the demand of divine omnipotence cannot itself be a ground for denying it.

(c) There are indeed facts which seem to lend support to the view that human volitions have no impact on the natural sequence of events. Even the best precautions sometimes fail to ward off an accident. Even a man like Hazrat Omar was brutally assassinated. But a proper analysis of the situations may reveal that for every such occurrence there is a sufficient cause. Good results from bad intentions, or bad results from good intentions, or incidents however unprecedented, are no proof of fatalism.

(d) In fact, the greatest drawback of fatalism is that, being essentially a matter of faith and outlook, it is not amenable to proof or disproof, and is to that extent simply irrelevant to science and philosophy.

Fatalism, says Durant Drake, does not show "the concrete ways our decisions are constantly being thwarted, and our feet turned toward the fated goal. That is never done; fatalism remains hopelessly vague; a mood rather than a clear hypothesis worthy of being debated."[3]

4. Indeterminism vs. Determinism

These are two other views on the present problem. In the philosophical sphere, the controversy over the issue virtually turns around these two

theories. Indeterminism or libertarianism maintains that the true self of a man consists in his will, and while his body is subject to causal laws, his will is free. By free will is meant uncaused will whose operations possess two essential characteristics, viz., unpredictability and genuine creativity. Of course, in reflex and in impulsive or habitual actions man behaves rather mechanically. But in voluntary action, his decision is not merely a result of conditions inside or outside him. His will is a power by which he can transcend these conditions and freely choose between alternative courses of action. Hence it is not only practically but theoretically impossible to predict his action in each case. There are real chances or real possibilities before him, and in choosing between them he is a truly creative agent.

Determinism or necessitarianism, on the contrary, maintains that the law of causality is as true of man as of nature in general. Every act of volition uniformly springs from certain specific conditions, so that if those conditions were known it would be quite possible to predict the action. But these determining conditions are not all external, as fatalism maintains. The internal conditions of the individual—his heredity, his character, his experiences and previous decisions—are the real determining factors. Our actions, says Hume, "have a constant union with our motives, tempers, and circumstances."[4]

Determinism is thus a midway position between the extremes of fatalism and indeterminism. Unlike the fatalist, the determinist allows both external and internal conditions a role in our decisions. For example, we choose to carry along an umbrella when it is raining, or jump into a river when a drowning man cries for help. But he points out that these external factors are not the only or the more important determinants. In the same situation, everbody will not run a risk to save another person's life. The environmental situation being the same, two different individuals may have two different decisions. Hence the individual himself is the real source of the decision; and the decision is determined by the sort of man he is with his native drives and powers of reasoning. But this 'sort', again, is determined by heredity and environment.

Thus a man is *determined* insofar as the constraint of external conditions and this causal determination of his character is concerned; but he is *free* insofar as his own self is at the moment the real spring of his choice. Freedom does not exclude causality, and vice versa. Man's decision is caused, but it is free because it is caused by his own self. "Freedom", says Alexander, "is determination in enjoyment."

In sum, indeterminism is the theory that our will is *uncaused* (without

any cause), while, according to determinism, our will is *caused* although its causes are not merely external but internal as well.

Historically, indeterminism is the rule and determinism an exception. The latter is generally associated with materialism and pantheism. The early Greek materialists advocated the universality of the causal law. Among the moderns—Hobbes, Spinoza and Hume are renowned determinists.* The naturalists of recent times also uphold the same view. On the long list of Western indeterminists we find Plato, Descartes, Berkeley, Kant, James, Bergson and countless others.

5. Arguments for Indeterminism

Determinists and indeterminists have offered different arguments in defence of their positions. Naturally, most of these arguments on both sides appear as attacks and countrer-attacks on each other. The arguments on the side of indeterminism may, however, be summarized as follows :

A. Psychological or empirical arguments :

(1) In willing we have an intuitive consciousness of freedom. Irrespective of external constraints or internal drives, we *feel* at the moment of choice that we are free. After one course of action has been chosen, we feel that we might well choose some other course. The consciousness of freedom is quite distinct particularly when a decision or a resolution follows upon due deliberation. The determinist cannot deny freedom without proving that this feeling is a sheer illusion (and it is not an illusion).

(2) It is a fact that the behaviour of a man cannot always be correctly predicted. He often does the most unexpected things. A man with a good heredity and environment, and being usually honest and trustworthy, may suddenly lapse into corruption, and conversely. Even the worst sinner is at times clearly conscious of his duties. This shows that there is a power in him which is free and capable of upsetting the causal order, of initiating fresh causality of its own, and effecting unforeseeable changes. Determinism reduces man to a machine, but a machine cannot have as much independence, novelty and variation as a man.

B. Metaphysical arguments :

(1) Determinism is usually associated with the monistic theories, such

* The term 'determinism' was first applied by William Hamilton to Hobbes's view to indicate its difference from fatalism.

as materialism, naturalism and pantheism. The indeterminist does not regard these views as satisfactory and advances some other view in their place. Indeterminism, as a rule, relates to idealism, dualism and pluralism. Descartes, for example, held that mind and body are two entirely different substances. Although the body is thoroughly mechanical, mind is free and in freedom consists the chief perfection of man. If man be a form of matter, and mind a mere epi-phenomenon, freedom becomes inconceivable. But the idealist argues that reality is essentially mental, which evolves through the lower categories of being to attain in man self-consciousness and freedom. William James made a strong advocacy of a pluralistic universe and the possibility of real 'chances' within it. Bergson made change or duration the core of reality and maintained that evolution is free and creative.

(2) Freedom is not necessarily inconsistent with the notion of causality and the principle of conservation of energy as the determinist supposes. Causality is only a hypothesis, and the causal principles so many rules of uniformity formulated from observed phenomena. They have no element of compulsion in them. It is not illogical to suppose that mental phenomena constitute a different sphere and the rules which hold good of the physical sphere do not likewise hold good of the mental.

Again, if by energy we not only understand physical energy but mental energy as well, then freedom does not affect conservation. Free volition is itself a kind of energy; and, therefore, when it initiates physical motion, we have only a 'transformation' of energy, so that the total amount of energy remains unaffected.

(3) Sometimes it is argued that determinism has lost its case, partly at least, within science itself. According to Heisenberg's principle of indeterminacy, the exact position and velocity of an electron cannot be precisely determined in advance. This shows that nature is at bottom capricious and the uniformities of observable phenomena are only statistics. If the minute electron can behave freely, the same is only so much more true of the complex human organism.

C. Moral arguments

(1) Many philosophers have argued that moral responsibility, or responsibility of any sort, presupposes freedom of the will, Responsibility without freedom is a contradiction in terms. We can not make anybody answerable, unless he is able to act freely. 'You ought' is meaningless without 'you can'. But moral obligation is a matter of experience and cannot be denied. Hence freedom must be real. Kant argued that freedom

cannot be proved but 'defended' on moral grounds, at least because it is not inconsistent with causality in the phenomenal order.

(2) Denial of freedom paralyzes moral endeavour and discourages the general struggle for existence. It deprives the very word 'effort' of all sense and significance. As James puts it, determinism presents a dilemma 'whose left horn is pessimism and whose right horn is subjectivism'. But theoretically the pessimism which determinism involves is likely to beget inertia and thereby hamper progress (moral progress in particular) in man's individual as well as collective life.

It may be noted that, of these two arguments, the first one may be called logical and second one pragmatic.

D. Theological Arguments

(1) Negation of freedom is inconsistent with the notion of God as the embodiment of justice. In the history of Muslim thought the Mutazilites argued that if man is determined, God cannot punish man for his bad actions. Without freedom of the will divine reward and punishment would only bespeak God as a whimsical autocrat.

(2) Foreknowledge on the part of God does not contradict freedom. St. Thomas held that just as we can remember the past without determining it, so can God foresee the future without determining it. 'God', said Leibniz, 'foresaw the sin, but He did not force the man to commit it. Sin is voluntary....Foreknowledge is not injurious to freedom.' It is also argued that God only knows how man will act, though man acts freely; or that God knows only the general outline of man's future free actions but not their details.

6. Arguments for Determinism

The arguments for determinism are mostly counter-arguments against the indeterminist. Determinism denies what indeterminism affirms.

(1) It is argued that our consciousness of freedom is an illusion unless it is interpreted in the right manner. This consciousness is virtually an awareness (enjoyment, in Alexander's language) of the processes of deliberation which are themselves determined. On the other hand, introspection also reveals that there are always causal processes shaping our decisions. In fact, psychological and sociological studies reveal that the will of a man is determined by a man's character, and his character by his heredity and environment. At any moment, the strongest motive determines his choice; and his motives and drives are the ingredients of his total nature. Human behaviour is therefore largely

predictable. If such predictions are ever wrong or impossible, the reason is nothing but our inadequate knowledge about a man's character or about the details of his situation.*

(2) Determinism may liken man to a machine, but not to an ordinary machine. By the analogy of a machine the determinist simply means that a man's behaviour is, like a machine's, determined by causal laws (by his internal structure and external environmental conditions). But he recognises the unique degree of complexity and fineness of the human machine. This is a machine 'which can do all that the heroes and saints have done, machines that feel and think and love and will'.

(3) Determinism is the only view consistent with the general scientific spirit. If matter is the ultimate stuff or if the world is one all-inclusive reality, no scope for indeterminism is left. There is no proof of mind as a separate substance with its own peculiar laws. *Ex nihilo nihil fit.* Science is based upon the notion that each event can be explained by its antecedents. Mechanism, once believed to be exclusively true of physical sciences, has extended itself to biology; and there is no reason why it should not extend further into psychology. In fact, modern psychology, particularly in its behaviouristic and psycho-analytic frontiers, is making great advancement on a mechanistic basis. Indeterminism also affects the principle of conservation by allowing free or uncaused volitions to add fresh energy to the total amount of energy in the world. This is unjustified. Thus, by contradicting the fundamental assumptions of science, indeterminism turns out to be unscientific and self-refuting.

(4) The indeterminist takes a wrong or confused view of the meaning of freedom. Paradoxically, a determined man is really free. A man is not free when swayed by emotion, or carried away by an impulse. He is truly free who has developed a stable character and is governed by his character. A child or a lunatic is not free. This is how we think, and quite rightly. C. A. Strong argues that by freedom is properly meant the freedom of choosing between alternatives and of deliberating before decision so as to make the decision 'the expression of our innermost, our entire nature. Such freedom (empirical freedom) is an undeniable fact, and the only kind of freedom essential to morality.'

(5) In fact, moral responsibility presupposes determinism, not indeterminism. If an action follows from a "moment's willing" not

* Alexander says that unprdictability is no necessary proof of indeterminism, since 'new' things are emerging out of the old even without violating the law of causality. For example, it is not possible to predict the emergence of mind at the level of life. Only the causal processes constituting the spatio-temporal basis of mind can be predicted. Hence novelty is not inconsistent with determinism.

essentially related to a man's real self or to his motives and habits, it is improper to regard the action as his own and hold him responsible. Even remorse, praise and blame do not become meaningless on the deterministic hypothesis, since these may serve as fresh determining motives for future moral actions. Punishment also does not become unjustified. If we take a corrective or preventive rather than a retributive view of punishment, the whole difficulty disappears. "When we allow pain in operative surgery to cure diseases which most people believe to be determined by natural causes, it does not seem unreasonable to allow pain to be used in the curing of criminal tendencies, even if they involve no free choice."[5]

(6) Indeterminism, rather than determinism, is pessimistic and practically disastrous. As Bertrand Russell puts it, "the conception of 'moral responsibility' is 'responsible' for much evil." It disposes us to overlook the real causes of crime and makes us harsh and unsympathetic towards the criminals. It shows all efforts of education and reformation to be useless. Such efforts are based on the supposition that once a man's character is shaped into the right pattern, his actions are likely to be good, since character is the chief determinant of a man's actions. "If after years of schooling the individual were able to turn his back on the pattern established and act arbitrarily in complete independence of his learned responses, what justification would education have?" (Mead)

(7) Last of all, some orthodox theological schools have argued that freedom of the will conflicts with the omnipotence and omniscience of God. If God allows man free volition, His own volition becomes to that extent limited. Further, that God foresees the future implies that the future is determined and nothing can change it.

7. Comments

(1) The arguments on both sides of the controversy present a sort of maze from which it is quite difficult to escape. Arguments on neither side seem to constitute a complete refutation of the opposite theory. In fact, there are psychological facts supporting both determinism and indeterminism; there are metaphysical grounds for accepting either of them, and so on. Even on pragmatic grounds neither of the views can at once be accepted or rejected. Indeterminism fills our heart with self-confidence and initiative; determinism provides encouragement by guaranteeing the efficacy of educative measures.

(2) Complete indeterminism is cleraly ruled out by the facts. That we are controlled by environmental factors, and determined by our total nature or even by momentary impulses, cannot be denied. To that extent

determinism is quite justified. But the question is : May we not have a mysterious power by which at least on occasions we can be a complete master of ourselves, overcome all inner and outer control, and decide just as we please? Such a decision will be perfectly free in the sense that it will follow from no antecedents except that power.

(3) Now, about such a power we can raise two questions. First, is the existenee of such a power disproved by the facts? Secondly, is it inconceivable? To the first question our answer is negative. The psychology of reflex actions and the findings of psycho-analysis merely show that there are real causes even for such actions and tendencies as appear to be mysterious or causeless. But they cannot certainly claim that their survey is exhaustive, or that there are no willings which are peculiarly undetermined Also our consciousness of freedom, as we shall see presently, cannot perhaps be as easily set aside as an illusion as the the determinist does.

(4) To the second question also our answer must be negative. Mechanical causality may be quite true of the lower types of beings, but it need not be extended to *every* case of human volition. On the hypothesis of emergence, freedom may be regarded as a quality attainable through the creative forces of evolution. If man as an emergent is unique in so many different ways, it is not unlikely that he is unique in this other respect also. This will only mean that the human organism, or a certain part of it, is so peculiarly developed that it can temporarily and in certain (i.e., volitional) operations act in disregard of the rest of the universe, or of all his past and future. This seems quite possible, but this does not and need not imply a whole-scale indeterminism. In fact, freedom seems to be a matter of degree and an object of attainment. A brute, a child or a barbarian is less free than a civilized educated man, for the former acts mostly under the constraint of inner impules or his sociophysical situations. And even among the educated men there is a hierarchy consising of wide differences of degree.

(5) Professor Broad's suggestion is in this context quite important. He says that the states of a substance are narrowly limited by its ultimate properties; but within this limit it has a certain amount of free play. Alexander maintains that in a sense all categories of beings are free. A plant is free in the enjoyment of its own determination. "The stone which for us is compelled from our point of view is free in its internal actions for itself."[6]

But he does not go far enough. A stone is determined in its formation out of soil. But once it is formed, it has a certain freedom (not in the sense of enjoyment) in the sense that it has a power of resisting its environment.

If we throw a small brickbat against it, the latter will be thrown back. As it appears, the essence of freedom is this power of resistance. And if a stone is capable of it, a highly developed human organism may be capable of it to a far higher degree.

(6) A true feeling of freedom is the feeling of this power of resistance. It is not easy to set it aside as an illusion, since it is inseparable from self-consciousness at least in its mature form. If self-conciousness has any cognitive value, freedom has a strong case on its side.[7]

8. Conclusion : Self-Determinism

What follows from our considerations is that the most agreeable view, under the present state of knowledge,* lies probably in a synthesis of determinism and indeterminism. We may call this view 'self-determinism."[8] It combines the half-truths in these rival theories. Determinism is right because the behaviour of man is for the most part determined—determined by external and internal conditions. The physical and social environment, education and training have a great effect on a man's behaviour. But his internal character, however formed, is perhaps far more important. Indeterminism is wrong insofar as it rejects this determination.

But this determinism is true only of the general stream of conduct. Ordinary people are almost entirely determined. Nevertheless, it seems quite possible for a man of uncommon mental power to shake off all compulsion, even the compulsion of his inner states, and make a free choice. Of course, such cases of free volition are rare and such powers a matter of achievement.**

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* "The rival hypotheses", as an author has remarked, "can, however, hardly be regarded as more than confessions of ignorance, and the moralist still awaits a theory of willing which will provide a satisfactory psychological basis for a theory of ethics."

** Of late, such a position has been held by C.A. Campbell (Vide—*Value and Obligation*, edited by R.B. Brandt). Campbell has rightly argued that being free is a creative activity by which man 'transcends' character as so far formed; and that it is contrary to facts to deny the existence of such creative power. Quite aptly does he observe that this creativity can be felt only from within.

NOTE

Freedom and Morality : The relation between freedom and morality is very intimate. The two are in fact inseparable. The reality of freedom has sometimes been defended on the ground that without it morality is impossible. Indeed, the idea of moral obligation becomes meaningless, if freedom is denied or disproved. Morality is a quality of volition; hence moral responsibility is possible only on the part of beings having free will. Our actions may 'otherwise' be good or bad even if we are not free, but 'moral' goodness is inconceivable without freedom. A machine (however perfect, or however useful or harmful), or a servant absolutely at the beck and call of his master, is not susceptible of moral assessment. When a little baby, asked by his parents, gives something in charity to a helpless beggar, his action is non-moral. Autonomy of the will, says Kant, is the supreme principle of morality. But, although morality is not possible without freedom, freedom is possible without morality; that is to say, a free will need not necessarily be moral.

CHAPTER XXI

IMMORTALITY

1. The Meaning of Immortality

Here is another problem of great interest, which is much more popular than the one considered in the previous chapter. Belief in immortality is probably as old as human thought. There is enough historical and archaeological evidence to the fact that even men of very old times were believers in life after death. "The subject", says William James, "is really an enormous one. At the back of Mr. Alger's 'Critical History of the Doctrine of a Future Life', there is a bibliography of more than five thousand titles of books in which it is treated."[1]

But the word 'immortality' is vague and must be clearly defined. It is sometimes taken biologically and very often socially. Biological immortality means racial immortality, e.g., survival in the persons of offspring through generations. Social immortality simply means continued existence after death in the memory of fellow-beings or in the pages of history. In the first sense, not only men but other animal species also are immortal. In the second sense, many men and women may claim immortality. It is very difficult to imagine that man will ever forget Shakespeare and Tagore, or Marie Curie, Einstein and Karl Marx.

But immortality, in the present context, is something altogether different. It means a man's never-ending existence after death as the same unique personality as he is. It implies that physical death is not the end of his life; it is even no break in his existence, but only a disintegration of his body, a change in his mode of existence. He continues to exist in some form or other even after death with his identity intact. Immortality is not impersonal continuity, or simple resurrection or transmigration of one's soul. It means an endless future, a continuity that knows no stop.

2. Belief or Disbelief in Immortality

As in the case of freedom of the will, belief in immortality also has been the rule, and disbelief an exception. Religion and popular

imagination are the two great strongholds of this belief, although there seems to be a substantial number of non-believers even among laymen. In the philosophical sphere, this belief goes, as a rule, with dualism and idealism, and the disbelief with materialism, naturalism and scepticism. On the one hand, we have the great Indian idealists, the Pythagoreans, Plato, Aristotle, Descartes, Berkeley, Kant, William James and countless other philosophers and thinkers; on the other hand, we have the Indian Carvakas, the Greek Atomists and the Epicureans, Hobbes, David Hume, Haeckel and many others.

3. Grounds for Belief in Immortality

There are many grounds both for belief and disbelief in immortality. Let us first consider the grounds for belief.

Traditional grounds :

The ordinary believers in immortality often rest their belief on its long tradition. The belief has been cherished in all ages. It is too old and too general to be outright rejected as an illusion. There is, as it were, a natural propensity in us to entertain the belief and seek proof of it. The impulse to seek proof of immortality, said Emerson, is itself the strongest proof of all.

Logical grounds :

(1) There are arguments showing that immortality is not inconceivable or logically impossible. The "supposition of a mind surviving the death of the body is not nonsensical in the sense of being self-contradictory."*

It cannot be *a priori* denied that there cannot be mental processes without corresponding brain states. The matter can be decided only by a reference to experience.

(2) W.T. Marvin contends that mind may be dependent upon the brain for its manifestation, but that does not mean that it is likewise dependent for its existence. The brain may be the only *known* instrument of mental activity, but it need not be the only one. We dare not, he says, change the proposition, 'the mind depends upon the brain for its manifestation' into 'the mind depends upon the brain for its existence.'[2]

(3) Similarly, William James argues that even if the soul be a function of the brain, "it is not at all impossible, but on the contrary quite possible,

* A. Pap, *Elements of Analytic Philosophy*, p.301. The occurrence of thoughts and memories in the absence of a brain may be empirically impossible; but if any one wishes to contend that this is logically impossible, the burden of proof rests with him. He would have to show that a statement of the form "x thinks and remembers; but x has no functioning cerebral system" is self-contradictory. Or, he would have to show that the only way one could possibly verify the occurrence of mental process is by observing certain occurrences in a cerebral system. But this contention, of course, would be preposterously false.

that the life may still continue when the brain itself is dead."[3] Function need not necessarily be 'productive'; it may be permissive or transmissive as well. It may be supposed that consciousness comes from a non-physical world of reality, and the brain simply helps its transmission into the world of experience as a prism helps the transmission of colours in light. It is, therefore, quite possible that with death consciousness goes back to its real source and continues to exist there.

Metaphysical grounds :

(1) Immortality is implied by certain metaphysical theories. Plato argued that the soul cannot perish, because it is simple and the very principle of life. Death is only a process of decomposition of the body. But the soul, being simple, cannot be decomposed. Again, life cannot become death; or being cannot pass into not-being. Immortality of the soul also follows from its rationality, its pre-existence (existence before its union with the body) and the goodness of its creator, God.[4]

(2) Plato's argument from simplicity has, in principle, been accepted by many. Berkeley, for example, tries to show that the soul is uncompounded, indivisible, incorporeal and unextended. Hence it is incorruptible and the natural course of decay and dissolution cannot possibly affect it. The soul of man, as he says, 'is naturally immoral'.[5] Leibniz maintained that the soul is a monad and that all monads are eternal. Immortality is, for him, a metaphysical necessity. It is implied by the nature of spiritual substance.

(3) Martineau argued that immortality is quite consistent with or even follows from the principle of the conservation of energy. If the principle includes physical energy only, then mind is independent of the body and may well continue after the body perishes. If the principle applies to mental energy also, then mind cannot perish with death. Its energy, like physical energy, cannot be lost but will continue to exist in some form or other.

Moral grounds :

Kant offers two moral arguments for immortality. First, justice demands that the virtuous will be rewarded and the vicious punished proportionately to their virtue and vice. Otherwise the world is unmoral and unjust. But often enough there is no proportionate adjustment of reward and punishment in this life. Hence, there must be an after-life in which this wrong will be righted.

Secondly, the moral life is an endless struggle towards the achievement of perfect goodness (which consists in the complete overcoming of the conflict between desire and duty). Hence there must be a never-ending future life in which each man will continue to struggle and

approximate more and more to the ideal. If the moral ideal is unattainable, it loses all signifincance and is no other than a deception. Kant argued for personal immortality, since morality is a matter of personal struggle.

Moral arguments have also been offered by some others such as James Seth, Martineau, and the Danish philosopher Harald Höffding. Seth, for example, says, like Kant, that the moral ideal is infinite and therefore unrealisable in this finite life. Hence each man must survive as a person and without end. Höffding argues that values cannot perish (conservation of values) and, therefore, the soul must continue to exist as their bearer.

Theological grounds :

Religion has usually laid great stress upon personal immortality and used it as a great stimulus to faith and virtue. In the general religious view, the soul is a separate force breathed into the human body, which survives the body and is destined to have an infinite life in the hell or in the heaven. Mythology abounds in thrilling stories of personal survival.

Pragmatic grounds :

Closely related to the above are what may be called the pragmatic gounds for belief in immortality. This belief is often prized as a great incentive to good action. Immortality, as James puts it, is one of the great spiritual needs of man. To many, life is robbed of much of its charm if it is allowed only this brief earthly span. Disbelief in immortality produces 'this-worldliness' and sets man after physical pleasures in disregard of the higher values. "If I err in my belief that the souls of men are immortal, I gladly err," said Cicero, "nor do I wish this error, in which I find delight, to be wrested from me."

Empirical grounds :

Western spiritualists claim to have established the survival of human soul on an empirical basis. Experimental evidences for the same are being accumulated over decades. Certain phenomena, such as cross-correspondence and automatic writing, it is claimed, can be explained only on the supposition that there are disembodied spirits capable of possessing living men or of communicating with them.

4. Grounds for Disbelief in Immortality

In spite of the above grounds, immortality has been to many a matter of disbelief or even an impossibility.

(1) First of all, the traditional and the theological grounds for belief are alleged to have little logical value. The truth-value of a belief is not to be determined by its age or by the counting of heads. The other grounds are also questioned by the materialists and the naturalists. As for the logical

and the metaphysical grounds, long ago the Epicureans maintained that we cannot think of immortality since the soul is composed of atoms which become scattered at death. Contemporary naturalists deny the dualism of body and mind. Since the mind is only a function of the organism, particularly of the brain, immortality becomes a logical impossiblity. There is no psychosis without a neurosis. Our consciousness of the past and personal identity depends upon memory; and, as scientific observation shows, memory is a function of the brain or is at least dependent upon it. But with death the brain perishes. Hence immortality is unthinkable. Such things as the simplicity or the substantiality of the soul are mere presuppositions which vanish in the face of experience and analysis.

When we learn, said Haeckel, how mental activities depend on physcial and chemical processes, and how evolution traces the human mind down to the minds of animals, we have to abandon the belief that there is anything in us that will survive the body.

(2) The world being physical on the naturalist's view, the moral arguments also share the same fate. Consciousness, personality and moral value are not among the ultimates of the world, but only human phenomena. "The mere desire that we feel to be present ourselves and continue our work begun here", says Alexander, 'admirable as it is.... cannot overrule the facts of our apparent limitation to the time and place of our bodily life."[6] Morality implies immortality only on the basis of idealistic metaphysics. Hence any such implication loses its force as soon as its basis is shaken.

(3) The pragmatic grounds are also unsatisfactory. Even if morality or even bare living were in need of immortality, the need itself could not constitute a 'proof'. To relate whatever is desirable to the cosmic order is anthropomorphism. Belief in immortality has been rather an incentive to inaction and neglect of this life, and consequently a hindrance to social progress. Again, that this life is alone real need not necessarily set men after wicked pleasures. Mortality does not necessarily take away the distinction between good and bad, as it is evident in Epicureanism. Rather, it stimulates efforts to make a heaven of the earth itself, without looking in vain for citizenship in 'the Kingdom of God'.

(4) Lastly, the findings of the spiritualists are not conclusive. Their findings have been doubted even by their close asssociates. It is yet a matter of debate whether the so-called spirit-phenomena cannot be explained by a simpler hypothesis than that of disembodied spirits.

5. Is Immortality Desirable?

Immortality is for the most people 'a pungent craving and the thought

of it an obsession.' Among thinkers. it has been generally desired by the idealists and those of idealistic leanings. Yet there are many who dislike it. The criminals and sinners would naturally prefer mortality in order to avoid divine punishment. Those who suffer or fail in this life are also likely to share this attitude, if they fear that immortality may mean a mere continuation of their suffering and failure.

But even among great thinkers and prophets of life, there are some who have disliked immortality. Schopenhauer, the pessimist, is a big example. 'To desire immortality', he declared, 'is to desire the eternal perpetuation of a great mistake'. Buddha propagated the cult of *nirvana.* Socrates was rather agnostic about immortality and showed greater interest in the life on earth. Nietzsche advised man not to listen to those 'poisoners and despisers of life' who speak of super-earthly hopes.

It is true that immortality is little attractive in an impersonal form or as a continuation of bare consciousness. Impersonal immortality is hardly true immortality. Immortality is desirable only if it extends the hope of personal survival, of enjoyment or further struggle for perfection. But it is doubtful that this desire can escape the damping effect of the law of monotony. A writer once remarked that it is shuddering to think of an endless existence in whatever form.

There is probably enough sentimental ground for a desire for immortality. Perhaps very few of us would lack a passionate longing for the warmth of a reunion with those near and dear ones whose separation has taken away much from their earthly existence. But an impossibility of immortality need not frustrate one too much. Considering the variety of pleasures and the scope for noble activity and cultivation of love and affection that *this life* affords, one may very well thank the 'God' of life for what he can give, rather than blame him for what he cannot.

6. Conclusion

Philosophy as such is not directly interested in the question whether immortality is desirable or necessary. Its immediate task is to see whether it is a fact. It is true that the question of immortality, like many other philosophical questions, has not been finally answered. Much of the naturalist's criticism of belief in immortality appears to be fairly sound. The moral arguments have a sentimental air about them. But there seems to be no reason for regarding immortality as either necessarily presupposed or implied by morality. Morality, to be a value, need not be there from the very beginning of the world; nor does it lose its significance even if some of our moral aspirations remain unfulfilled.

But is immortality at all possible? It is quite difficult to answer. No doubt, it seems impossible in view of the crude metaphysics of the ancient or orthodox materialists. But that metaphysics is no longer predominant. If evolution has really produced anything like mind or mental energy out of simpler physical elements, immortality may be conceived as the conservation of that energy in some unknown form.

It seems, however, that the question cannot and should not be answered merely on an *a priori* logical basis. From this perspective, the experimental work of the spiritualists is not only welcome but commendable. Observation reveals facts which evade armchair theorizing. But we must not forget the distinction between immortality and mere survival. Even if survival be empirically established, immortality may still remain a question-mark.

NOTE

Immortality and Morality : There is no necessary connection between the two. Either is possible without the other. That is, a moral being need not be immortal, and an immortal being need not be moral. The so-called moral arguments for immortality are inconclusive. An ideal does not cease to be an ideal even though it is not at all realised. Man's moral struggle does not lose its significance even if it is never fully successful.

Immortality may, indeed, give some special impetus to our moral struggle, and add a special charm to the moral ideal; but that is off the point in a logical assessment of the nature and value of morality. A man may lose faith in morality because he finds morality never or nowhere seriously practised, or because he finds life too short for the realisation of his own moral aspirations; or a man may resolutely pursue morality because it guarantees endless happiness after death; but of these two positions the first one is mistaken, and the second one non-moral.

PART VII
AXIOLOGY

CHAPTER XXII

NATURE AND KINDS OF VALUES

1. The Nature of Value-Judgment

Judgments of value are different from the ordinary judgments of fact. While the judgments of fact are merely descriptive, judgments of value are appreciative. For example, the judgment 'This rose is red' is descriptive; whereas the judgment, 'This rose is beautiful' is appreciative. The former simply states a fact or describes an object; but the latter evaluates or appreciates it. Thus value-judgments imply approval or disapproval and refer to an ideal, criterion or standard. Our judgment that this rose is beautiful expresses our approval and refers to the standard of beauty. But there are different types of value-judgments and different criteria corresponding to them. While descriptive judgments are positive, value-judgments are normative.

2. What is a value?

The word 'value' has more than one sense. As a verb, it means 'to appraise or to prize'. As an abstract noun, it means a quality—the quality of worth or goodness. As a concrete noun, it means the things which possess this quality. All these senses involve each other and display the appreciative, evaluative or normative nature of value-judgments.

The notion of value involves the idea of satisfactoriness. A value satisfies (a) a standard and also (b) a mind, as an object of desire. Thus a value is something worthy, something which constitutes a goal of our behaviour. In brief, values are the supreme norms of action, the ultimate ends towards which human efforts are directed.

3. Kinds of Values

But all values are not regarded as of one kind or of equal status. We have different kinds or types of values, mainly for two reasons. First, human life has various physical and spiritual aspects, and there are

different types of activities corresponding to them. Secondly, these activities are considered to be of various degrees of worth. Some values appear to be superior, some inferior; some permanent, some momentary; some real, some illusory. Helping a distressed man and taking physical exercise are both values; but generally the former is regarded as superior. Accordingly, we have different classifications of values.

(a) **Physical vs. spiritual values—the tertiary qualitties :** The first principle of classification concerns the interests or spheres of activities to which the values belong. Hence we have a broad division of values into physical and spiritual. The former values are roughly related to our biological interests, e.g., food, sex, health, wealth, etc. The latter relate to our mental or spiritual interests, e.g., truth, beauty and goodness. Truth is called the logical value, because it is concerned with our logical or cognitive interests. Similarly, beauty and goodness are, respectively, called the aesthetic and the moral value.[1]

These three values are also called 'tertiary qualities' in the sense that they are qualities of things and yet different from the primary and the secondary qualities. In order to distinguish them from the other values they are also called 'the higher values of life', and sometimes a fourth one is added to the list, viz., God. The divine being is looked upon as an object of desire, as something which satisfies a certain type of spiritual hunger. Following the same method of naming, God is called the 'religious value.'*

(b) Intrinsic and extrinsic values : These are the two most common of all classes and are based on the second principle of classification, viz., the principle of relative worth. From this standpoint, the contrast between these types is regarded as the most basic. An intrinsic value is one which is an end in itself, while and extrinsic value is only a means to some higher value. Intrinsic values are independent and absolute, but the extrinsic values are contingent, relative and instrumental. For example, happiness is generally desired for its own sake, and money as only a means to it. Happiness is intrinsic, while money is extrinsic. Truth, beauty and goodness are usually regarded as the most important of intrinsic values.

(c) **Other classifications :** Another common distinction on the second principle, is between *higher* and *lower* values. Values related to our mental or spiritual aspect are usually regarded as higher, and those related to our physical aspect as lower. The higher values are of a more subtle and delicate nature than the lower ones. The higher and the lower values

* Everett in his work 'Moral Values' divides values into eight groups: Economic, Bodily, Values of Recreation, Values of Association, Character Values, Aesthetic, Intellectual, and Religious. He, however, does not claim that his list is perfect.

roughly correspond to the intrinsic and extrinsic values explained above.

W. M. Urban, in his *Fundamentals of Ethics,* classifies values as *organic* and *hyperorganic.* The former relate to bodily, economic and recreational satisfactions; while the latter relate to character and intellectual, aesthetic and religious pursuits. Two other divisions are between (a) inclusive and exclusive, and (b) permanent and transient values. Those values are inclusive which can be shared by many and are rather enhanced thereby. A good humour or the beauty of a good painting, for example, increases in value as it is enjoyed by a larger number of people. On the contrary, the exclusive values cannot be so shared. For example, the same economic goods, when possessed by one, cannot be possessed by another. Permanent values are those which give a relatively lasting satisfaction, while the transient ones are a matter of the moment. Usually, the mental pleasures are relatively permanent, while the bodily pleasures are transitory.

4. Comments

The distinctions made on the first principle of classification are quite simple. There is little ground for objection to them, if we remember that these distinctions are not watertight compartments. The physical and the spiritual aspects of human nature being intimately connected, there is close relation between these two classes of values, as well as between different values within these classes.

As for other classifications, they are both theoretically and practically important. Man as a reflective being cannot live without some theoretic satisfaction and conceptual clarity. At any moment he is bound by circumstances to make judgments of preference and choose between values. As it is said, he has 'to put first things first and second things second, or in other words, properly to arrange valuables'.

But such categorisations are not as easy or as valid as they might seem. There is no strict general agreement either in theory or in practice. To most, for example, health and wealth are values of great importance, but to an ascetic they are relatively worthless. To a miser, money is often the supreme end. Even the status of truth, beauty and goodness as intrinsic values is sometimes doubted. Truth, for instance, is sometimes regarded as inferior to what are called 'spiritual values', and reason as subservient to faith.

In practice, higher and lower values appear to be relative to human preference. Again, a permanent value is not always preferred to a transient one. To a dying man, for example, a glass of water is far more desirable than a poem or a sermon. In fact, such diversities are not merely a matter

of temperament; there are great logical difficulties involved. To many, the definition of the word 'intrinsic' is a great hurdle. Again, the contrast of higher and lower refers to a criterion other than values, and involves a circle. It is, however, important to realise the nature and great practical bearing of the problem, even though it does not admit of an easy solution.*

5. Are values subjective or objective?

The question is whether values are real or merely subjective, whether they imply any real quality in the objects of value-judgments. For example, when I judge 'This flower is beautiful,' is the beauty of the flower merely a mode of my appreciation? Or, is it a real property in the flower itself? In other words: Is the flower beautiful because I appreciate, or do I appreciate because it is beautiful? In the former case, its beauty is subjective; in the latter case, objective. In other words, value-judgments, being normative, have a reference to some standard. But how is that standard determined? Is it determined by the preference of the subject or by some real quality in the object?

Each situation of value-judgment has two aspects. On the one hand, there is the *act* of valuation; on the other, there is the *object* evaluated. Values or their standards become subjective or objective according as we lay exclusive emphasis on the act or the object. But we may also emphasize both. Hence there are three possible views, all of which have been upheld by philosophers.

Firstly, according to the *objective view*, values are real properties of things. They are absolute, and not dependent upon human preference. There is something in a good action itself or in a beautiful work of art, in virtue of which it satisfies. That intrinsic property would remain what it is even though there were none to appreciate it. It is argued that there is substantial agreement over value-judgments among men of a certain cultural level. Man can be trained in value-judgments, and such trainings take them over to a common standard.

This is the traditional and popular view. Modern realists, such as Moore and Perry, also uphold the same view. Idealists generally emphasize the objectivity of the higher values of truth, beauty and goodness. The judgment of value, says Pringle-Pattison, 'is as objective in its own sphere as a scientific judgment on matters of fact'.

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* We shall try to solve it in Ethics. It may be further noted that all these lists and classifications miss the most intrinsic and fundamental of all values, viz., *rationality*. Rationality is not mere fidelity to truth. For this and also (for the solution of the stated problem, see Section 5 of Chap. XXVII)

According to the *subjective view*, values are relative to the interests and preferences of the subject. While the objective view lays emphasis on the object of value-judgment, the subjective view emphasizes the subject. Something is a value, an object of desire, because it 'satisfies'. It is argued that there are wide variations in value-judgments from age to age and from person to person. Values are subject to change; a value of to-day may not be a value of to-morrow. This is because something is a value only in virtue of its being satisfactory, its capacity for serving some interest of the subject. This view is upheld particularly by the naturalists and the pragmatists.

The third view synthesizes the above theories and regards values as subjective-objective. Samuel Alexander is a typical representative of this position. Values, according to him, are both subjective and objective. "We have values or tertiary qualities," he says, "in respect of the whole consisting of knower and known in their compresence. Strictly speaking, it is this totality of knower and known, of subject and object, which is true or good or beautiful."[2] Thus a thing is good or beautiful both beacuse it is of a certain nature and because it satisfies a person. According to the objective view, the value-judgments are analogous to descriptive judgments of fact. They describe real qualities of things. According to the subjective view, value-judgments are purely evaluative. But according to the synthetic view, they are both descriptive and evaluative.

6. Comments

(1) Of these three views, the last one seems best, though none is fully satisfactory. The last view rightly gives importance to both aspects of value-situations, but only insofar as values are objects of desire. Nothing can be desirable or desired without relation to a desiring subject. But the subject normally does not desire arbitrarily but on an objective basis. Even such a simple value as food is both subjective and objective in this sense. It is subjective because nothing can be food unless there is a living being to desire and feed on it. The same food may help a normal man, but harm a patient.. But when it helps or harms, it does so because of certain inherent properties of its own. Hence it is not merely subjective but objective as well.

(2) This seems to be equally true of the higher values. They satisfy because human nature is a nature of a certain kind. Truth and goodness satisfy because man is rational, while beauty and God satisfy because he has certain types of emotions. But truth and goodness satisfy also because they are what they are. A true judgment is opposed in content to a false one; and a good action is opposed to its bad counterpart. Similarly, we

move away from an ugly thing, because it differs essentially from a beautiful object.

(3) But, in so far as they relate to a standard, all values are not of the same status. The standard of truth is absolute and objective. A judgment is true or false solely because it fulfils or does not fulfil certain objective conditions.. On the contrary, the other values, except morality, are subjective-objective. Their standards are determined both by the subject and the object. Morality seems to occupy a middle position. It has a formal as well as a material aspect. In its formal aspect it is fixed and absolute, but in its material aspect it is relative to subjective interests.

7. Metaphysical status of values

What position do the values occupy in the scheme of reality? There are two opposite possibilites. Values may be rooted in the very heart of reality, and all movements and processes of the world may be directed towards their realisation. Or, they may be merely a human affair, the external world being indifferent about them. This question is raised particularly about the higher values, i.e., the logical, moral, aesthetic and religious values. It is closly connected with the question of the objectivity of values. And naturally, therefore, its answer also has intimate relations to any answer to this other question.

Philosophers are broadly divided into two groups over this question. Usually, the idealists accept the first, and naturalists the second possibility. On the idealistic side, we may mention Plato, Fichte, Rickert, Munsterberg, Royce, Bradley and many others. For Plato, the highest reality is the Idea of Good. Fichte discovered the ground of the world in the moral value. MÜnsterberg said that the higher values are ultra-personal ends; they reside in the ultimate reality, viz., the Super-ego, and are gradually realised through his will. Pringle-Pattison regards the Absolute as the embodiment of truth, beauty and goodness. Bradley maintains that the Absolute is not only non-contradictory but also perfectly good and emotionally satisfying.

The naturalists generally regard values as human phenomena, relative to human experiences. They reject the idea that values have a supernatural origin, and are realised and conserved through the will of a supernatural being like God. The universe is essentially physical and all conscious behaviour is only a more complex form of physical processes. Hence values have no significance beyond the human sphere. They are neither the ground nor the goal of the universe.

But there are important exceptions to this general naturalistic position.

Some neo-realists, though naturalistic in temper, ascribe to the values a position allied to idealism. They do not regard values as existents but as *subsistents.* Values are neither illusory nor existing in space and time like ordinary physical objects. They have a peculiar logical being which they call 'subsistence' in order to distinguish it from 'existence.'

Alexander, another neo-realist, classifies values as emergents on a naturalistic background. Values, according to him, are characters of the amalgamation of subject, and object. But yet they are real, since this amalgamation is itself real. Values are creations of mind in the sense that they are dependent upon it; but mind being real, its touch cannot 'de-realise its creations'. Values are 'emergents' from the combination of mind and object, and are as real as the other emergents. But Alexander does not regard values as supreme ideals of the world. Values are no doubt the highest emergents so far. But he believes that there is a next higher level, namely, *deity;* and the evolution of deity, i.e., of one deity after another is an endless process.

8. Criticism

(1) The emergent view of values seems to be highly, though not fully satisfactory. It is right in asserting the objectivity of values. Value-judgments are not nonsensical as the logical positivist maintains. Nor are they absolutely relative to human interests as the pragmatist thinks. But Alexander's notion of deity as something transcending values is highly doubtful. We cannot think of norms higher than the logical, moral and aesthetic values.

(2) The idealistic view is highly inspiring; but it is also only partly true. Evidence does not substantiate the view that values are embodied in a personal deity like God or an impersonal Absolute spirit who is struggling for their realisation through man and nature. It is more plausible that values are only potentially contained in nature and become conscious phenomena at the level of man. It is perhaps too much to think that they are the final causes of the world. We can well think of a world without man and his value-consciousness. But this does not diminish the reality or worth of values. A nightingale is not unreal or less real even if the world cannot be conceived to have 'consciously' evolved or evolved 'only' towards its emergence. An ideal is not less so, if it remains unrealised. Time and space are no measure of values.

(3) In one sense, however, all values are eternal, and may rightly be called subsistents in the neo-realist's language. They are eternal as 'possibilities.' The concepts of organism and food, for example, are

logically eternal, while their being conceived by a mind is contingent and temporal. In the same way, a proposition and its truth, an object and its beauty, or an action and its moral quality are eternal possibilities.

9. Is life itself a value?

This question is at once interesting and important. Its answer is also apparent. We may take the word 'life' either biologically or axiologically. In the first sense, it means the bare existence of an organism. In the second sense, it means rational, vigorous, meaningful and fruitful existence. It is obvious that life in the first sense cannot be a value. Without relation to conscious valuation values are mere possibilities. Inanimate objects and the lower organisms cannot evaluate. Hence even though their existence may have a cosmic value, it has no value for them. Again, bare existence belongs to a level below the level of human existence and is not a value to man. Human beings strive not merely to exist but to have a life meaningful and valuable.

But life in the second sense is obviously a value—an intrinsic value to which bare life is instrumental—because life in this sense is inclusive of the values as such. When Kant talks of a kingdom of ends, or says that suicide is immoral, he makes rational life and not bare life an end in itself. When the poet sings the glory of life, he means a noble and successful life. "If this life be not a real fight, in which something is eternally gained for the universe by success, it is no better than a game of private theatricals from which one may withdraw at will."[3]

The lower forms of life, since they are incapable of valuation, are not a value unto themselves. But, nevertheless, they constitute a value *to man* (i.e., to all rational beings) insofar as they are capable of pleasure and pain, have a degree of intelligence as well as a capacity for love and sympathy.

Good vs. Evil

Values are so many goods, but each value has its negative. Hence, corresponding to each value there is a disvalue or evil. Evils are as real or unreal as goods, and susceptible of a similar classification. We may, accordingly, divide them into seven principal classes : natural, physical, intellectual, moral, aesthetic, social and sentimental. For example:

Natural—earthquakes, cyclones, floods, epidemics, etc.

Physical—disease, ill-health, pain, deformity, etc.

Intellectual—illiteracy, prejudice, error, etc.

Moral—ill-will, greed, falsehood, fraud, theft, murder, etc.

Aesthetic—ugly sights, grotesque shapes, etc.

Social—factionalism, autocracy, negation of the freedom of thought or freedom of association, war, social unrest, etc.

Sentimental—hatred, envy, lack of sympathy, meanness, etc. [cf. the list of values in Chap. XXVII.]

CHAPTER XXIII

TRUTH, BEAUTY AND GOODNESS

1. Truth as a value

Truth is one of the higher values. Truth is primarily a quality of statements, which is the opposite of falsity; but it also means 'true knowledge' and the moral quality of truthfulness. Truth as a value includes all these. It is usually regarded as an intrinsic value, or an end in itself. But it is not always desired, and is not considered desirable at all times. A culprit willing to avoid punishment does not desire truth before a magistrate. It is believed that truth cannot always be desirable in politics. This, of course, is a matter of temperament. It is highly doubtful that science and philosophy will continue to be encouraged if they begin to tell upon the other interests of the majority of men.

The facts, however, have been otherwise. Man has advanced from primitive conditions through an ever-widening acquaintance with the secrets of nature. There are cases in which truth may be harmful. It is, for example, better for a seriously ailing mother not to know that her only son has been killed in an air-crash. But such exceptions little affect the general rule that truth is useful. On the other hand, man has often forgone happiness or even risked his life in search of truth for its own sake. History has produced a great many Columbuses and Galileos. Knowledge adds to life the flavour of meaning and worth, but for which man is hardly different from a lower animal. Moreover, curiosity is part and parcel of human nature.

But, as already indicated, truth has reference to a standard which is absolute and independent. The truth of a judgment is determined neither socially nor by its efficiency but by a comparison with the facts or with the other judgments already accepted as true.*

2. The natue of Beauty

Beauty as a value is both subjective and objective. It is a common

* For discussion on this standard. see Chap. VII.

object of desire— apparently more common than truth. There is hardly any normal individual who is not attracted by an object of beauty. There are, however, diverse theories as to the nature and the standard of beauty. First, there are the 'subjectivists' who maintain that beauty is thoroughly mental and is not a quality of the object. Croce, for example, says: "It is always our own intuition we express when we are enjoying a beautiful work of art."[1] On the contrary, Richard Price maintains that beauty is a quality so "inherent in objects that it would exist in them whether any mind perceived it or not."

But these are extreme views, and the truth lies, according to many, in their synthesis. "Beauty", says Langfeld, "is neither totally dependent upon the person who experiences, nor upon the thing experienced; it is neither subjective nor objective, neither the purely intellectual activity, nor a value inherent in the object, but a relation between two variables—the human organism and the object."[2]

There is, of course, evidence in favour of both of the extreme views. Conceptions of beauty more or less differ from age to age, country to country, person to person, even from one age of the same person to another. Once small feet were very much liked by the Chinese, but the idea is now giving way. Ornaments loved by the womanfolk of many African tribes have no appeal to our ladies.

All these imply subjectivity. But, on the other hand, "wherever education has advanced beyond the elementary stage, there is a consensus of opinions as to what things are beautiful and what are not."[3] Minor differences do not matter, since they are nothing peculiar to aesthetic judgments. In fact, the judgment of beauty is educable and there is a norm towards which artistic progress is directed. Hence beauty cannot be wholly subjective.

Beauty is either natural or artifical. That is to say, beautiful objects are of two types: those produced by nature and those produced by men. A moon-lit night, a peacock with its distended tailfeathers, a rainbow, the voice of a cuckoo—these are natural beauties. Artificial beauty is displayed in the various arts—poetry, music, drama, dance, painting, etc. In all these arts beauty appears in various forms, but its essence remains the same.

Aesthetic apprehension is intuitive in character. It brings the subject and the object so close to each other that they almost lose their difference. It has a prominent emotional tone, and is very largely a matter of feeling. Great artists, great poets and painters, are of extra-ordinary imagination and feeling. But intellect also plays an equally important role in it. 'If we glance through the history of art', says Langfeld, 'we shall find that those

who have produced the most enduring works were men of great intellect as well as of deep feeling'. Such immortal painters as Michael Angelo and da Vinci, such great dramatists as Shakespeare and Shaw, such great poets as Tagore and Iqbal are examples in point.

As subjective, beauty arises in the process of a certain type of response on the part of a subject. This response is intellectual as well as emotional. But it is a response to a certain type of objects. Hence beauty is objective also. The object appreciated possesses certain qualities in virtue of which it elicits the aesthetic response. The most basic and general of them are unity, order and harmony. The different parts of a beautiful object must have a unity, must be orderly and harmonious. A rose is beautiful because its petals have a harmony. Colours and shapes used in a good painting do have an order and harmony among them. The same is true of the diction of a good poem or the rythms of a good musical composition. "The beauty of the beautiful object," says Alexander, "lies in the congruence or coherence of its parts. According to the ancient doctrine it is the unity within that variety."[4] This coherence or unity is three-fold: unity of form, unity of content, and unity of form with content. In a good poem, for example, its parts must have a unity of rhyme; a noble thought cannot be mixed with a vulgar one; its language must be chaste if its central theme is high.

3. Decency

There is another value which is virtually one form of beauty. This is the value of decency. Decency also is desirable and has reference to a standard. It is not a matter of any organised art; nor is it necessarily related to moral characer. It is particularly a value of 'manners'. We talk of decorum, of decent gait or of decent language. Courtesy, meekness and such other virtues or elementary rules of behaviour are aesthetic rather than moral. For example, when a man takes pride in his learning or noble deeds, his action is not immoral, but indecent or ugly. The popular judgment about such things is sometimes mistaken. Western nudism and sexual leniency, for instance, are condemned as immoral. In fact, they are not immoral as long as they are in every way harmless. But one could call them indecent, at least when they exceed the limit. Many of the traditional religious injunctions are really a matter decency.

4. Theories of the Moral Standard

The moral value, also called the moral virtue or morality, is one of the three cardinal values. It is rightly viewed as of supreme importance, particularly from the standpoint of social life. There are, however, many

different theories of the standard of morality, and they have been variously classified. They appear to be of two broad types. The first type is represented by the 'absolutists.' and the second type by the 'relativists.' According to the former, the moral standard is absolute, immutable and eternal, and not relative to human intersts. The latter maintains the opposite view, making the moral standard relative and teleological.

Absolutism, again, has various forms. Ralph Cudworth (1617-1688), for example, maintains that the moral standard exists in the nature of things, which no law, decree, will or custom can alter. On the contrary, the general religious postion is that the moral law is determined by the will of God. This is also the view of such great medieval thinkers as Duns Scotus and St. Augustine. "God," said John Gerson (1363-1429), "does not require certain actions because they are good, but they are good because He requires them : just as others are evil because He forbids them."

There are two other forms of absolutism. Firstly, according to some thinkers, the goodness or badness of an action can be apprehended immediately by a natural faculty we possess. Shaftesbury calls it the 'moral sense', while Butler calls it 'conscience'. Shaftesbury compares this sense to our sense of smell and regards the taste of the 'moral connoisseur' as the true guide. In the next place, we have the famous theory of Kant, known as *a priorism*, intuitionism or rationalistic rigorism. According to it, the moral law lies in men's reason. Morality or virtue is an absolute value. It is no other than reason as applied to action, i.e., practical reason. The moral imperative is categorical; it enjoins upon us an unconditional obligation to do our duties. A duty must be done, not for the sake of happiness or any other ulterior end, but out of respect for the duty itself. It says, "Act only on that maxim whereby thou canst at the same time will that it should become a universal law."[5] It further wants us to accept the law of duty of our own accord; and never to treat any rational being merely as a means but as an end as well.

Relativistic theories regard the moral standard from the standpoint of consequences. According to absolutism, goodness is to be defined without any reference to consequences. Morality has no necessary connection with our well-being. It is determined either externally by God or the nature of things, or internally by our conscience or reason. But, for relativism, consequences alone are the ultimate determinant of goodness. Actions are good or bad insofar as they do or do not lead to some desirable consequence. There are three main forms of relativism according as there are three desirable ends : viz., hedonism, perfectionism or energism, and asceticism.

Hedonism regards pleasure or happiness as the end of moral actions. In egoistic hedonism it is the happiness of the individual; in altruistic hedonism or utilitarianism it is the general happiness of the society— the greatest possible good of the greatest possible number. Utilitarianism, in the words of J.S. Mill, holds that "actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure; by unhappiness, pain, and the privation of pleasure." (*Utilitarianism*, Chap.II)

Perfectionism identifies the moral end with self-realisation, i.e., the full expression and development of our capacities. This is the view of Plato, Aristotle, Hegel and Green. Man is endowed with various faculties and tendencies. He has appetites, intellect, reason, emotions, creative urges, and so forth. Goodness or perfection consists in exercising his capacities and satisfying his urges to their fullest and without any conflict among them. In a word, the good man is the one who develops a perfect personality through a full and harmonious exercise of his capacities.

Asceticism is radically opposed to both of the above theories. It makes self-abnegation the moral end, either because self-abnegation is itself a value or because it is a means to a better life after death. In its first form it is typically represented by the Cynics of ancient Greece, as well as the Buddhist cult of *nirvana*. In its second form, it is illustrated in the monastic orders of medieval Christianity; in certain types of *yoga* practices of India, and also in extreme forms of *Sufism*. Asceticism finds goodness in mortification of the soul, or at least in the rigorous curbing of bodily and mental desires and refusing to satisfy them.

5. Comments

(1) None of these theories, however, has been accepted as fully satisfactory. The theory which makes God the ground of morality is unsatisfactory, since morality excludes all external compulsion. No action is moral unless its principle is spontaneously desired as something reasonable. Hedonism is untenable because morality is an independent value and cannot be made a mere means.

(2) Perfectionism stands between the horns of a dilemma. It is apparent that all faculties cannot be allowed to develop. But if perfectionism involves morality in its selection of those faculties which alone should be developed, it contains a vicious circle. If it excludes morality, obviously, it cannot afford a standard of 'moral' action (cf.Kant). Asecticism in its first form is utterely a negative standard, based on no arguments. In its second form, it is not only negative and unpractical; it

makes morality a means, and a means to a doubtful end.

(3) Kant's theory has certain great merits. It is emphatic on the status of morality as an absolute value. Its central theme is simple in form and easy to apply. Essentially, it commands us to respect other selves and never to do what we cannot expect others to do. A cheat does not like that others should cheat him. It seems, therefore, that it is not hard to understand and apply Kant's doctrine.

But in fact it is not free from difficulties, and Kant has actually been criticised on several grounds. The apparent applicability of the theory has been seriously questioned. It has been argued that Kant has missed the very point by making reason the sole basis of morality. Practical situations are not subject to purely a priori logical considerations; they are more complex than Kant's doctrine supposes. Moreover, although reason may be able to suggest appropriate means to the realisation of practical ends, it cannot determine the ends themselves.

(4) It seems, however, that there is some truth in almost all these theories. Even asceticism, in its moderate form, is right in pointing to the value of self-restraint and to the need of curbing our desires. There are two basic aspects of moral situations. On the one hand, the moral value is intrinsic and absolute; on the other, man has other drives than mere reason. He seeks happiness, aesthetic pleasure, association, recreation, prestige, opportunities for creation and self-expression. A satisfactory theory of morals must give due recognition to both of these aspects. The problem of the moral standard is one of the oldest philosophical problems, and probably the most important of them. But alas! it has as yet remained unsolved. This is certainly very unfortunate. (See also Chap. XXVII, Sect. 4)

PART VIII

PHILOSOPHY OF RELIGION

CHAPTER XXIV

THE NATURE OF RELIGION

1. Philosophy of Religion : Its problem and relation to Theology

The philosophy of religion, as we have already seen, is a systematic study and critical evaluation of religious dogmas, of religious doctrines and institutions. It asks about the origin, validity and value of religious beliefs and attitudes, and seeks to determine the place of religious principles and practices in our life. The problem of the philosophy of religion takes the form: "Are any religious beliefs true? If so, which ones, and why? Are any religious value-claims truly objective? If so, which ones, and why? The best possible answer to these questions is the best possible philosophy of religion."[1]

It is, therefore, important to distingaish it from theology. Theology (which literally means 'discourse on God') has both a narrower and a wider sense, and is either rational and critical or authoritarian and dogmatic. In its narrower sense, theology is simply a study of God and His relation to the world. In its wider sense it is a general study of religious doctrines including the problem of God. Rational theology, in a narrower or wider sense, is obviously a part of the philosophy of religion. But it is to be noticed that 'theology' is usually taken to mean the study of a particular religion—a study which is essentially, though not quite entirely, based on the respective religious authority and tradition. We thus have such divisions as Christian theology, Muslim theology, and so on. Theology in this narrow sense, or theology insofar as it is authoritarian and dogmatic, is at best a science (i.e., a *systematic* study), but not philosophy.

The philosophy of religion is, on the contrary, a branch of philosophy and is out and out an independent critical discipline. It considers religion in general, explains its basic principles, and tries to assess their theoretic and practical value, their metaphysical and pragmatic significance. Both in spirit and method it is different from dogmatic theology. It is neither limited to any particular religion, nor bound by allegiance to any tradition or religious authority.

2. The Nature of Religion

The first important question of the philosophy of religion is: What is religion? Popular veiws of religion vary, and thinkers have defined religion in numberless ways. Kant defined religion as 'the recognition of all duties as divine commands.' Schleiermacher said: "To take everything individual as a part of the whole, everything as a representation of infinite—that is religion." In another definition: 'Religion is the recognition and cultivation of our highest emotions, of our more beautiful instincts, of all that we know is best in us.'

The reason for this diversity is two-fold. There is a terribly large number of religions having different aspects; and it is possible to emphasize one or another of these aspects. Fully developed religions such as Islam, Hinduism and Christianity, however, have certain common and basic features. We may explain them under four heads.

(a) **Theoretic features :** They ask their followers to have faith in certain things–certain entities, certain events and principles. Islam, for example, asks every Muslim to believe in Allah, in Hazrat Muhammad (Sm) as His Prophet, in revelation, in the truth and divineness of the Quran and so on; while Christianity enjoins upon its followers a faith in such fundamentals as the supernatural birth of Jesus, the Trinity and the Resurrection.

(b) **Moral and social features :** They ask people to live a good life and accept certain rules of conduct as divine commands. They emphasize social responsibilities and exhort people to practise justice, love and brotherhood. To that effect, they present a more or less elaborate system of social regulations.

(c) **Spiritual features :** They insist on certain things as of supreme value, such as faith, piety, and purity of the heart. But the greatest emphasis is laid on the relationship between man and the supreme deity, i.e., God. Love of God, divine grace and beatitude are regarded as things of the highest worth, embodying the highest fulfilment of man's finite and mortal existence.

(d) **Ritual and ceremonial features :** They also prescribe certain rites and ceremonies as methods of expressing man's gratitude and love towards the supreme being, or of realizing the supreme values. Such places of prayer and worship as the mosques, temples and churches are regarded as the best places for performing these ceremonies.

In view of all these, Brightman's definition of religion seems quite agreeable. "Religion', he says, "is concern about experiences which are regarded as of supreme value; devotion towards a power or powers

believed to originate, increase, and conserve these values; and some suitable expression of this concern and devotion, whether through symbolic rites or through other individual and social conduct."[2]

Thus religion is a concern of all aspects of human nature—intellectual, emotional and volitional. The religious attitude is a reaction of man's entire nature to the world, in which the world is regarded as having a meaning and working towards the realization of some values. These values are not only conceived by religion but persistently imposed upon man as the highest goals of action. Hence, religion is both theoretical and practical, both legislative and executive, and differs in important respects from science, art and philosophy.

3. The inner significance of Religion

All religions are not excactly alike in form or content The traits explained above are not present or equally present in all religions. For example, while ordinary Hinduism believes in many gods, and Buddhism in none, Islam lays great emphasis upon the unity of God. Mystics usually give little importance to ceremonials and regard religion as a matter of purity and spiritual experience. What, then, is the essence of religion? The general view is that religion is a 'way of life'. It arises from man's consciousness of his finitude and imperfection and his desire to partake of a larger reality as a supreme value. It is an expression of his craving for something higher, of his inner urge to transcend the limitations of his earthly being and make life significant and worthy.

Sometimes a simpler and wider view of religion is taken. Vergilius Ferm, for example, points out that the significance of the word 'religion' is adjectival. 'Religious,' rather than 'religion', is fundamental. To be religious is to effect in some way a vital adjustment to whatever is reacted to or regarded implicitly as "worthy of serious and ulterior concern." On this view, even a professional pugilist would be religious provided he reacted to his gloves and his profession "in a way which could be regarded as of ulterior interest."[3]

This is an unusual view; but the fact remains that religion is really a matter of adjustment and ulterior concern. Finally, therefore, religion may be said to have *three* essential traits: (a) It is normative, and presents something as of supreme value; (b) it is emotive because faith in this supreme value and the methods of its realization are tinged with emotional fervour; and (c) it is injunctive insofar as it 'commands' its followers to do certain things and have a certain way of living.

4. Chief Religious Beliefs

Of the two broad aspects of religion, theoretic and practical, the latter is more important. Religion is above all a creed, a code of conduct or a method of life. But practice must be based upon theory. Hence the moral emotional and ceremonial features of religion are based upon certain ideas and beliefs as follows :

(1) *The belief that there are experiences of great and permanent value :* Religion believes that the world including man is not a mere fact, but has a character, a meaning and a value. There are certain things of inherent holiness, certain ends of intrinsic value, some realities of supreme worth. "The essence of Religion," says, Leighton, "is faith... in a Cosmic Fountain of all Good, the ultimate object of devotion."

(2) *The belief in gods or God.* Most religions rest upon a belief in supernatural divine beings, regarded as the sources of value and the guardians of good. In great monotheistic religions, such as Islam and Christianity, a single God is believed to be the creator of the world, the embodiment of all values, and the ultimate source and goal of all that exists. Even such exceptions as Buddhism and Jainism, which began without such a belief, have gradually tended towards it.

(3) *The belief that man has a soul and that this soul is immortal.* Religion finds the chief meaning of existence in man's spiritual essence and considers immortality as a condition of spiritual fulfilment. Of couse, there are a few exceptions in respect of immortality; yet 'it is so nearly universal, that it must be considered characteristic of religion.

(4) *The belief that there is evil as well as good.* Religion believes in real good and evil, and commands man to fight the latter. Primitive religions believed in demons and prescribed taboos. Beliefs in Satan, Ahriman (in Zoroastrianism), sin, atonement, redemption, conversion, reform, etc. all imply the recognition of the existence of evil.

(5) *The belief that there is purpose in human experience :* that the world, and particularly man, exists in order to fulfil some supreme ends.

(6) *Belief in valid religious experience.* It is believed that such phenomena as sacraments, conversion, mystical experience, and worship are objective, and capable of establishing immediate relations between man and God.

(7) *Belief in religious action :* 'This appears in the believer's faith that his religion should, either partially or wholly, regulate his conduct both individual and social'.

Brightman mentions three central beliefs of religion, viz., (a) that there is an objective source of value, (b) that human individuals experience

values, and (c) that religious value is experienced as a relation of the human individual to the Divine.

Two things, however, may be noted as regards the nature and import of these beliefs. Firstly, these have been called 'beliefs', because in principle religion enjoins faith rather than provide proof, and actually also these have not been scientifically demonstrated. Secondly, these beliefs have an intimate relation to philosophical theories and make philosophy and religion closely bear upon each other. In and through these beliefs religion presents a view of the world and man, develops a cosmology and an ethic. Thereby religion has not only suggested to philosophy many or most of its problems, but has greatly influenced their philosophical solutions. For example, "belief in man's soul or spirit involves philosophical psychology. The belief in purpose, human or divine, is inseparable from the philosophical problem of mechanism and teleology."[4]

5. The Origin of Religion

The question is : How could religious beliefs arise or religous attitudes grow? Various answers to this question may be considered under four heads.

(1) **The theory of divine origin :** This is the view of the orthodox believers, as well as of thinkers with a religious bias. Orthodox believers are convinced that religion has come direct from God. Religious scriptures strongly testify to this. Religous truths are taken to be 'revealed' truths. For example, in the popular Islamic conception, God is a personal being Who revealed the Quran to His prophet through His massenger, Jibril.[5] The *Gita* is regarded as the word of God. Islam believes not only in the revelation of the Quran, but in three other 'heavenly books', and also in numerous prophets prior to Hazrat Muhammad (Sm.) to whom divine truth had been revealed.

(2) **The naturalistic views :** These include the views of psychologists, anthropologists, sociologists, and philosophers of scientific leaning (who are classed as naturalists). They reject the orthodox view of supernatural origin and explain religion as something rooted in human nature, in man's natural, emotional and social experiences.

Long ago Epicurus and Lucretius maintained that religion had its origin in the fear of gods wrongly believed to be malicious. Sometimes, religion is traced to the emotion of wonder, or the sense of mystery. Freud and Feuerbach maintained that religion is a rationalization of desire, a case of wish-fulfilment. It arises from man's natural longing for the fulfilment of his deepest wishes. 'Gods', says Feurbach, 'are the wishes of men, either actualized or represented as real beings. God is nothing but man's

drive for happiness, satisfied in imagination.' Freud describes religion as an illusion 'derived from man's wishes.'

In the communists' view, religion is an instrument of exploitation. Religious conceptions arise and find support as a device for pacifying the classes that are exploited and oppressed by the classes in power. Marx and Engels said that religion is a cloak for the system of exploitation, and variations in religious ideas arise from class distinctions.

(3) **The theory of *a priori* origin :** According to Rudolf Otto (1869-1937), the religious attitude is partly intellectual, but primarily a kind of emotional experience. This experience is unique and qualitatively different from ordinary emotions and natural experiences, and is called by him 'numinous.' He contends that religion, both in its intellectual and emotional aspects, is *sui generis* and *a priori.* The notion of God, the numinous awareness of Him and the general religious attitude do not 'emerge' from any foreign, empirical or more ultimate source. They are rooted in the very 'ground of the soul'. Religious impulses are the very original and intrinsic properties of the soul. Experience can only excite them sympathetically, and evolution sharpens them; but they are already there as original and *a priori.*[6]

(4) **The cosmological view :** This is the usual view of the idealists. They look upon religion as arising from, and expressive of, the ultimate relation between man's finite spirit and the absolute spiritual reality underlying phenomena. Hegel, a typical idealist, regarded religion as an imperfect manifestation of the absolute spirit— as an incomplete realization of the infinite by the finite spirit.

Alexander also credits religion with a cosmic origin and a cosmological significance. In his opinion, the religious sentiment is not illusory but rooted in the mind, and, through that, in the very heart of the universe. It is but the natural reaction of the mind to the impact of the universe in its nisus towards further development, towards the realization of the deity. It is a natural appetite like hunger, whose object is God. The world in its forward movement acts upon our bodily organisation, and 'the religious sentiment is the feeling for this whole'.[7]

It may be noted that, among these views, there is a sharp opposition between the first and all the rest. In the sphere of critical thought the orthodox view of revelation has always been set aside as crude and anthropomorphic. The naturalistic view is unsatisfactory insofar as it fails to recognise that religion is a matter of the entire human nature and instead gives exclusive attention to some particular aspect of it. As B.P. Bowne (1847-1910) points out, no living process can be traced to any single and

simple origin. In this respect, Thouless seems to strike on the right key when he talks of five roots of belief in God— traditional, natural, moral, emotional and intellectual.[8]

The most generally accepted view is that religion is a peculiar response to the environment, coming forth from man's *entire nature*—his sense of wonder and of dependence upon superior powers around him, his fear, reverence and loyalty, and even from his crude moral feelings and tendencies to rationalise. But this is only the exterior of the phenomenon. The interior, as it seems, is reflected in the cosmological views. Religion as a real phenomenon cannot be barely human. It must have a reference to the outer reality and be somehow rooted therein. Such a position is, in a way, quite consistent with the conception of divine origin, if revelation and prophecy are not taken in their crude orthodox sense.

6. The Validity of Religion

Religious beliefs may be divided into three groups: cosmological, axiological, and ceremonial. The first includes beliefs containing a view of the world, of human nature and the relation between the two. Beliefs in gods, or in God as the creator of the world, beliefs in soul, immortality, heaven and hell—all fall into this group. The second group includes beliefs in moral and social values and also in such purely religious values as holiness and grace. To the third group fall beliefs in the necessity, validity and sacrosanctness of specific rites and ceremonies. The question of the validity of religion bears upon all these three groups of beliefs; but usually the philosophical interest centres around the former two.

There are two extreme types of answers to this question, and a third liberal type in between them.

1. The orthodox or dogmatic views : Orthodox believers are fully convinced of the validity of all religious beliefs. The beliefs are regarded as revealed ideas, and, therefore, the highest and most doubtless of all truths. They are eternal and immutable. If any belief seems to contradict reason and experience, it is because God knows many things which our finite intellect cannot grasp. God exists as an omnipotent and omniscient person. Heaven and hell exist in a physical form somewhere in a far-off corner of space. Usually the followers of a particular religion regard the moral, social and ceremonial beliefs of that religion alone as infallible and unchangeable, and are disinclined to give much importance to those of some other religion.

Many thinkers of the middle ages argued in favour of the orthodox view. St. Augustine, St. Anselm, Al-Ghazzali, *et al.*, are well-known

examples. Augustine regarded the Church as not only infallible, but as the visible appearance of the 'kingdom of God'. Ghazzali condemned philosophy as incapable of the ultimate truths which are either revealed to the prophets or grasped in the mystic's ecstasy.

2. The naturalistic views : Diametrically opposed to this position are the veiws of the materialists and the naturalist philosophers and psychologists. In the purely mechanistic view of the world, presented by the materialists, there can be no place for any spiritual entity or any spiritual values. The naturalists reject the cosmological beliefs of religion as sheer fancy. There is no transcendent god, no supernatural source of values. Values arise through social experience and have an altogether social and human significance.[9] Religious values do not denote 'ends in themselves,' or spiritual noumena, independent of us, but only immanent forms of life. Their validity is only a matter of experience. The way they operate and play a role in sustaining and enhancing our life is decisive. In this respect they are not distinguishable from the other values.

Santayana holds that religion is a matter of imagination, pure poetry which never pretends to literal validity. The naturalist psychologists, such as Freud, explain religious beliefs as rationalisations or wish-fulfilments. Vilfredo Pareto regards religious beliefs as no real knowledge, but mere 'derivations' from sentiments rather than facts.

Comte, the great French positivist, regarded religious beliefs as absolute hypotheses which have no value in the present age of science. Logical positivists have even gone further to declare that religious beliefs are nonsensical.

3. The liberal views : The idealists and certain classes of rationalists and realists take a liberal view. None of them accepts the orthodox anthropomorphic view of God, or believes in Heaven and Hell as popularly understood. But they ascribe a deeper cosmic significance to the fundamental religious beliefs. The idealists, as a rule, believe that the world is at bottom spiritual and there is a real ground of value-experiences. Many of these liberal thinkers have argued that God exists as the ultimate ground of things, though not as a personal deity. In a word, these thinkers agree that religion has a meaning lying beneath the popular faiths. Religion can be and must be taken in a logical spirit free from popular crudity, sensuousness and anthropomorphism. Thus taken religion is not ignorance, nor an illusion, but the expression of the inner reality and significance of the world. Only, in its popular form this expression is metaphorical and insufficiently articulate.

7. Comments

(1) Of these views, the last one seems to be the most satisfactory. It is also the most widely-held view. It rightly treads a middle ground between two extremes. The present problem is no doubt a very important one. In fact, apart from popular biases and metaphorical associations, this is just the central problem of all really serious philosophy. The essence of religion is a consciousness of meaning and value, coupled with a fervent striving towards them. The central question of philosophy, as a more ultimate discipline than science, is whether this consciousness and striving has any real basis and significance. Hence, philosophy asks about the ultimate reality, about matter and mind, about mechanism and teleology, and so forth.

(2) But the problem has not been solved. Neither orthodoxy nor naturalism has yet justified its claim fully. Orthodoxy frankly insists on *faith*, while naturalism bases its claim on science and the scientific method. But mere faith cannot long satisfy a rational being, and the original rigor of naturalism has given way. Pringle-Pattison distinguishes between higher and lower naturalism, and identifies the latter with the older rigorous form of naturalism which rejects the objectivity of spirit and its ideals. But he vigorously argues that lower naturalism is exploded by the very findings of modern science—particularly by the findings in its biological sphere.

(3) The general belief is that science and religion are so opposed to each other that they cannot sit together. No doubt, history depicts a more or less regular warfare between science and religion.[10] But that has been due to misunderstanding and orthodox dogmatism. The current attitude is different. It has been realized that (physical) science and religion deal with different problems relating to different aspects or spheres of our experience. Science seeks truth about 'facts', while religion interprets them and appreciates 'values'. In interpreting, religion too uses certain hypotheses like science and philosophy. A hyphothesis is tested by its conflict or coherence with experiences in general. Hence religious hypotheses are not necessarily quite untestable. They are not 'nonsensical', so long as they do not so contradict reason as to be altogether absurd. The more essential beliefs of religion are hypotheses of great import and practical value. They will continue to be more and more tested in the light of experience. Religious propositions may be verified, so says Brightman, "although with less certainty than scientific ones. There is no reason why a coherent interpretation which includes both our value experiences and sense experiences should not be true."[11]

8. Good and bad aspects of Religion

The history of religion shows that religion is not and has not been an

unmixed blessing. Even the naturalist admits that religion has served a very useful purpose in the history of man. But it has also been a source of misery, of conflict, backwardness and suffering.

The good side of religion :

(a) Religion has been good as well as bad both in theoretic and practical spheres. Theoretically, the religious prophets and saints have usually been above the general intellectual level of their communities, and a source of great enlightenment to their followers. They removed prejudices and inspired people with noble thoughts and fresh quests for truth. When Arabia was in utter darkness, Prophet Muhammad (Sm.) said: 'Go to China, if necessary, for acquiring knowledge'. The great Hindu and Christian missionaries rendered valuable service towards the general illumination of the masses. Higher religions have always presented a view of the world and life, which has met the intellectual requirements of numerous souls, and fulfilled the demands of the time.

(b) On the practical side, the services of religion have been even greater. Religion has inspired the masses with moral and social ideals. In the case of the truly inspired men, love of God has led to genuine love of ideals. In the case of ordinary people, fear of divine punishment as well as the allurements of the heaven has been an effective stimulus to virtue and social justice. A particular religion with its dogmas, institutions and ceremonials, has been a strong organised force, binding its followers by fellow-feeling and a sense of unity.

This has not only greatly helped the cause of civilization and cultural progress, but spared man of much of his blood and peace of mind. Not only that, belief in one God as creator and sustainer of the world at once fosters a sense of the unity and brotherhood of all men and speak of the deep significance of human nature and existence. Curiously enough, religious rites and ceremonies are a good source of recreation.

The bad side of religion :

(a) In the theoretic sphere, religion is alleged to have been a hindrance to the progress of critical thought and scientific investigation. History has witnessed many instances of ecclesiastical persecution. Socrates was condemned to death, Galileo was imprisoned, and Bruno was burnt at the stake. Science and philosophy are usually viewed with suspicion by naive believers, and sometimes openly criticised as heretical by ignorant fanatics. The authoritarian outlook or insistence on blind faith, as a rule, lulls our

curiosity and dulls our intellect. This results in dogmatism, conservatism and reactionary tendencies. What is worst, this naturally begets fanaticism leading to communal hostility or even rioting and bloodshed.

(b) On the practical side, religion has been attacked from many directions. It is alleged that religion is most responsible for the division on men into innumerable groups. Religion no doubt engenders unity and fellow-feeling within a group, but at the same time makes that group hostile to others. Even within a particular religious group there are sub-groups. The Hindus are divided into many castes, and Muslims into many sects. History has seen many 'crusades', and communal riots. Religious rites easily degenerate into soulless formalities in which the real spirit of pious living is miserably lost. Corruption and exploitation play havoc under the disguise of religion. It is also alleged that religion nurses an other-worldly attitude which affects man's incentives to struggle and progress.

There is truth in all these criticisms. But the fact remains that religion, particularly in its developed forms, has always aimed at understanding and human welfare. It has, in real terms, never encouraged sectarianism, jealousy and injustice. All these are only due to stupidity or perversion resulting from ignorance or greed and selfishness on the part of the believers, more particularly, their leaders.

9. The future of Religion

The past of religion, as we have seen, has not been an unmixed blessing. It has been a source of evil as well as good. But with the passage of time religious tensions have more and more subsided. Reason is gradually prevailing over orthodox faith. Religious fanaticism is declining day by day. Yet, the present of religion is not altogether different from its past. Religious distinctions are yet widely mistaken and misapplied for selfish ends. To many minds, religion is yet felt to be one of the principal sources of distinctions and groupings among men. Hence religion is a hotbed of controversy and the future of religion a matter of profound doubt.

Comte rejected traditional religion and sought to replace it by 'the religion of humanity'. Man, not God, was to him the real or appropriate object of worship. Nietzsche condemned religion altogether as a creed of the feeble. The communists abhor religion as 'the opium of the masses'. Yet there are thinkers who take a liberal view and find religion to be of great spiritual satisfaction and practical value. "Religion", says Radhakrishnan, "is, in essence, experience of or living contact with ultimate reality." It can give us "the highest that man can possess, constant contact with the creative principle of which life is the manifestation,

coincidence with the divine will, serene calm, inward peace which no passion can disturb, no persecution can dismay."[12]

Dr. G. C.Dev defines the essence of religion as the awareness of the spiritual unity of man coupled with the ethics of universal love. He condemns religion in its plural and perverted form, but believes that religion in its true colour can be of immense service to man. In his own words: "If religion ceases to be an institutional affair and becomes typical of the attitude and character that follows from its essence, as it should, its future must be bright.... No better cohesive force, no better bond of unity, no better antidote to the philosophy of hatred is conceivable."[13] Even organised or institutional religion, he thinks, can be of service to man, if, without bothering much about heaven and hell, it adopts a programme of reformation and material welfare.

10. The value and importance of the Philosphy of Religion

The philosophy of religion is one of the important branches of philosophy. In view of its comprehensiveness and close relation to life (through its concern with religion), it is perhaps the most important of all branches. It begins its career with Hume's works[14] on religion, the first of which was published in 1755. Since then nemerous works have been produced on this subject, including those of Kant, Schleiermacher, Hoffding, William James, Caird and Pringle-Pattison.

Those who look upon science and philosophy with suspicion are very likely to suspect the philosophy of religion all the more. They regard faith and reason as sworn enemies of each other, and fight shy of the latter in order to safeguard the former. But there are believers who are convinced that faith and reason need not and connot clash. Many philosophers of religion are also of the same opnion. But while the believers approach the compromise from the side of faith, the philosophers do it from the side of reason. They regard religion as a matter of intuition and personal experience, and believe that intuition and experience in their true character cannot conflict with reason. But, if they conflict, the verdict must go in favour of reason. Edward Caird, for example, contends that the human spirit is not so divided against itself that faith and reason cannot subsist side by side in the same mind, each asserting as absolute principles which are contradicted by the other. We must have rational grounds for the acceptance of a supernatural revelation. 'Reason', he says, 'must be competent to judge, if not the content, at least the credentials, of revelation.'[15]

Thus, on the one hand, there is no ground to suspect that the very secret purpose of philosophy is to demolish faith. On the other hand, there

is great need for a philosophical overhaul of faiths. "Faith by which we live and grow", so says an author, "is faith cultivated by critical intelligence.... We cannot trust reason in one field and distrust it in another. A God in whom we cannot believe with reason is a frail idol, and faith based exclusively on emotions is as transient as a cloud."[16]

Because of certain reasons, such an overhaul is not only theoretically inescapable but is also of profound practical importance. Firstly, faiths, including even the conception of God, more or less vary from one religion to another. Truth is one and, therefore, man as a reflective being cannot accept these variations as such. Secondly, religious values appear to be frustrated by facts of experience. The most pious man or the most loving devotee is not always, if ever, the happiest man. God does not seem always to 'listen to' His devotee's prayer. Thirdly, while science has already established its authority as supreme in the study of nature, it is indifferent or even sometimes hostile to religion, particularly to her cosmological claims.[17]

But the philosophical overhaul is not necessarily destructive; it may be quite constructive. On the one hand, if philosophy can 'prove' that none of the religious beliefs is valid, the matter is settled once for all. If, for example, the non-existence of God can be proved as conclusively as the non-existence of the sun in the night's sky, then even the most orthodox fanatic will not probably believe in God any longer. But if such conclusive proof be not possible, no mere speculation or hypothesizing can possibly do away with all scope for belief. Hence, the believer need not be afraid of reason. On the other hand, philosophy can strengthen the ground for faiths by clarifying and humanizing them, and purging them of all prejudices and superstitions. Only thereby can religion become a genuine instrument of man's material and spiritual welfare. The history of religion shows how the lack of such purifying and humanizing has from time to time utterly frustrated the real purpose of religion and lowered its prestige even in the eyes of bare common sense.

> As W.K.Wright aptly puts it: 'The time has passed when thinking men and women can either accept or reject religion uncritically. The age of faith, when persons could be led through simple and childlike trust to accept religious teaching unquestionably, has passed away. No reasonable person now can think it wrong to doubt, or to ask for the reasons, why he should believe. And, on the other hand, the time has ceased when any one who knows anything about the subject tries to explain away religion by attributing its origin to fraud and superstition. A factor that has persisted so long in human history, and influenced society in all ages so profoundly, must hold some integral place in human life and experience.... Religion must be regarded as one of the most important and fascinating subjects for human investigaiton.'[18]

CHAPTER XXV

GOD

1. The problem of God

God is one of the central problems of traditional philosophy. If philosophy of religion is in a sense the most important branch of philosophy, God is in the same sense the most important problem of the philosophy of religion. This is apparent from the fact that religion is basically a matter of value-consciousness, and all values, in almost all religions, centre round the notion of God. Problems of the philosophy of religion are both theoretically and practically inescapable. The problem of God is most so. Being reflective in naute, even a believer cannot rest too long without some sort of critical cosideration about his object of worship.

There are three basic questions about God. What is God exactly? What is the relation between Him and the world? And if God is (described as) so and so, does such a God really exist?

2. The religious conceptions of God

God has been conceived in many different ways, in both religion and philosophy. Religions may first be divided into two main groups—theistic and atheistic. The first group believes in God and includes almost all religions. The second does not believe in God and consists of very few members, including the two great Indian religions, Buddhhism and Jainism. But the theistic religions also differ in their views as to the nature and number of God, and such views fall under three heads— monotheism, ditheism and polytheism.

Monotheism is a belief in one God. He is believed to possess all traits of perfection—omnipotence, omniscience, omnipresence, all-goodness, and so on. He is the creator and sustainer of all things, but is Himself uncreated, eternal and infinite.[1] He is usually conceived as without any definite shape, and yet as a person cabaple of thought, decision and communion with human souls.

Christianity, Islam and Hindu Brahmaism are lofty examples of monotheism. But even within a particular form of monotheism, there is not always agreement as to the precise nature of God. In the early history of

Islam, for example, there was a controversy between the Mutazilites and the Asharites over the attributes of God. The Mutazilites tried to defend the unity of God, saying that the ninety-nine attributes of God are not *in* His essence, but identical with His essence. The Asharites, on the contrary, contended that the attributes are in His essence, but differently from the way attributes belong to His creatures.

Ditheism is the view that there are two gods. Zoroastrianism believes in two rival gods— Ahura Mazda (the god of light) and Ahriman (the god of darkness). Ahura mazda is the god of good, while Ahriman is the god of evil. Both are personal and finite spirits, in ceaseless opposition and rivalry. The good spirit is the source of all that is good and beautiful; while the evil spirit is the cause of all evils, ugliness, deformity and imperfection. The good spirit tries to make the world perfcet, but his plan is not fully carried out owing to the opposition of the evil spirit.

Polytheism is the belief in many gods. This is illustrated in the religions of ancient Egypt, Greece, Rome and Babylonia. The gods of polytheism are finite, conscious and personal (except in manaism) spirits, sometimes regarded as eternal. They are usually believed to govern different departments of nature or different affairs of man. Thus there are gods of the sun, the moon, rains and springs; gods of parenthood, fertility, love, war and peace, trades and professions; gods of wisdom and music (cf. Brightman). They are believed to be involved in man's weal and woe, and to respond when prayed to.

Popular Hinduism is polytheistic, centring round three principal spirits— Shiva, Kali, and Vishnu. Most usually, offerings are made to the goddess Kali, when a believer finds himself in difficulty. Sometimes one of the gods is regarded as supreme. For example, in Greek polytheism, Zeus was looked upon as the supreme God. Polytheism thus becomes 'henotheism'.

There are also other conceptions of God. Animism, spiritism and manaism are believed to be the primitive notions of divinity. In higher religions, morality is the central value, and God is, above all, a morally perfect being. Descartes bullt up his philosophical system upon the notion of the veracity of God. But this conception is not universal. Gods are not always conceived as morally perfect. This is evident from the great many stories of intrigue and moral turpitude about gods and goddesses in Greek and Hindu mythology.

3. Comments

(1) Of these views, monotheism appears to be the most agreeable. It

has certain great merits. It emphasizes the unity of the world, and, through that, the unity of all human beings. This is not only theoretically satisfactory but of great practical social value.

(2) It is more consistent than the other views with the conception of some of the most important elements of divinity. God can be infinite, omnipotent and omnipresent only if He is one. "Spiritual, personalistic monotheism expresses the faith of most actual religions at what they regard as their highest point."[2]

(3) Monotheism is almost universal among philosophers. The early Greek philosophers used to believe in the existence of many gods. And of late Alexander speaks of the possibility of finite gods or angels, as well as of an infinite God (See next section). But for this little exception, philosophers have perhaps always been monistic in their talk about God.

(4) But monotheism suffers from one great difficulty. If God is one, all-powerful and all-good, it is not understood how there could be any evil. In this respect the position of ditheism is theoretically much better. God is good, but He cannot make the world perfect because of oppostion from an evil power. This reminds one of the Heracleitean conception of the world as run by opposite forces and Empedocles' principles of love and hate.

(5) But this dualism is not exclusively a merit, but at once a demerit of ditheism. Many would think that if God be limited, He is hardly a God. And this defect of ditheism appears in polytheism in a far larger measure. Polytheism renders God into something hardly much better than a man, except for his supernatural or miraculous powers. Many gods of polytheism or many of their deeds are even below the general level of human drawbacks.

(6) Anthropomorphism, more or less, characterises all religions. Even the naive believer in one God regards Him as capable of sensation, thought and judgment in the human sense of the terms.* But on the whole, monotheism is better than its two rivals. In fact, the progressive evolution of religion has been a transition from polytheism to monotheism, in which gods have been gradually decreased in number, conceptualised and moralised. The rivalry between Ahura Mazda and Ahriman is much like rivalry between two men. But anthropomorphism far exceeds in polytheism. The gods of polytheism are capable of incarnation in human forms; they also marry and have children.

4. Philosophical conceptions of God

The philosophical conceptions of God are also various. Many

* The word, 'God', and 'He' or 'he' as its pronominal substitute vaguely impress upon the popular mind that God is somehow masculine.

philosophers of early Greece used to believe in a plurality of gods. Xenophanes attacked the Greeks for their anthropomorphic view of gods, as well as for ascribing to them ordinary human corruptions such as fraud, theft and even adultery. Epicurus also believed in many gods, but conceived them as relatively indifferent towards man. Vis-a-vis this belief in many gods, the materialists and the naturalists of all ages believe in no god at all. The world being in their opinion out and out physical, there is nothing spiritual, not to speak of an omnipotent divine creator. The logical positivists simply reject the idea of God as nonsensical.

Between these two extremes are those who believe in God and give Him the highest status. These include philosophers of various schools—rationalists, empiricists, pragmatists, idealists, realists and even naturalists of a liberal type. They are usually monotheists and indentify God with the very ultimate reality or the absolute ground of the world.

Of course, there are a few curious exceptions. Plato, for example, regards Ideas and matter as co-eternal with God, and conceives Him as creating the world out of matter after the image of Ideas much like a human artificer.* Aristotle also believes in matter and regards it as one of the four primal causes of things. In his view, God is the prime mover, pure form—at once the formal, efficient and final cause of the world. He is pure thought, 'the thought of thought', non-existent and yet absolutely real, the infinite ideal towards which the world is evolving. Bradley thinks that since whatever is relational is an 'appearance' and God is related to His worshippers, God cannot be the absolute reality. He is only an appearance of the Absolute Spirit, though of a very high order.

Those who identify God and reality also, more or less, differ in their conceptions. Obviously, their views are as varied as their theories of reality. The conceptions of the medieval philosophers are thoroughly coloured by the general monotheistic notion. Even in Descartes, the father of modern philosophy, the religious notion is predominent. "By the name of God", he says, "I understand a substance infinite, independent, all-knowing, all-powerful, and by which I myself, and every other thing that exists... were created." (Meditation III) Thus he regrards God as a substance, an all-perfect spirit, the ultimate ground and 'creator' of the world. Spinoza conceived God as one Substance having matter and mind as two of His infinite number of attributes. He diverges from the common conception in regarding God as neither spiritual nor material, but neutral.

The idealists conceive God as the ultimate spiritual reality underlying

* Of course, Plato's view appears in other forms as well. Sometimes he identifies God with the highest Idea, the Idea of Good.

phenomena. He is immanent in and realizes Himself through the world. In Fichte, this reality is the Absolute Ego; in Hegel it is the Absolute Idea; in Schopenhauer it is the Absolute Will; in Lotze it is the Infinite Personality, and so on.

Herbert Spencer, the evolutionist, identifies God with the unknown but infinite and eternal energy which manifests itself in matter and mind. Pringle-Pattison, in his 'higher naturalism', conceives God as the absolute spirit which manifests and realizes itself in and through nature. Alexander develops a view of God on a basis of liberal naturalism. He thinks that the world is made of space-time charged with a nisus towards deity. This spatio-temporal world, including man with his mental peculiarities, is, according to him, the body of God while deity or divinity is His mind. But deity is an infinite ideal. Hence God's body is alone actual, and his mind always remains ideal.

All these are intellectualistic conceptions. But there are other conceptions also. William James, for instance, speaks of a 'spiritual weather' in which the visible world is soaked and bathed, of a divine *more* which we can feel through our spiritual nature. Rudolf Otto thinks that the total nature of God contains both rational and non-rational, moral and non-moral elements. God cannot be fully comprehended in conception, but must be felt. Thus He is not merely the supreme spirit, the moral will or the supreme reason; He is at bottom a 'mysterium tremendum' (tremendous mystery). He is not only possessed of omnipotence, omniscience, justice and mercy; He has wrath also, and is absolutely stupefying, overpowering and unapproachable. He is at once a fact and a mystery; at once an object of fear as well as our highest regard and love.

Of late, the domiant tendency is to take a simpler view of God. Orthodox anthropomorphism and even many of the metaphysical determinants of traditional philosophy are purged out of the idea of God. In this simpler view, God need not be the creator, the ultimate substance, the first cause or the omnipotent absolute spirit. He is rather the repository of human values or the embodiment of goodness. He is, in Dewey's words, a symbol of the unity "of all ideal ends arousing us to desire and actions."[3] He is the ideal tendency prevailing in nature, the organising, integrating and creative energy that evolves the world towards ideals, towards higher levels of perfection. It is this creative energy which is the source and condition of our values, which stirs our mind with the consciousness of and the nisus towards them. Matthew Arnold contends that the real sense of 'God' is 'the best that man knows and can know'. Lloyd Morgan regards God as the basic directive activity, and Bergson as the original creative impulse, behind evolution.

5. Contents of the idea of God

God has been variously conceived both by believers and thinkers. The manifold content of the idea of God can be analysed as follows :

(1) God is the uncaused cause of all things : God is the first cause, the cause of all things, without Himself having a cause. He is the supreme creator, but Himself uncreated. He is the only self-conditioned absolute being, the primal source of all reality. In the orthodix view, as well as in the opinion of some philosophers, such as Plato, God created all varieties of things by special acts of creation. But in the usual scientific and philosophical view, God does not create all varieties at once, but only gradually through a process of evolution.

(2) God is a supernatural spiritual personality. God is a substance, and not a mere cluster of qualities. But the divine substance is out and out spiritual. He has created matter or created things out of matter, but is Himself thoroughly non-material. He is not an abstract unconscious principle, but a self-conscious person. He is capable of knowledge, will, judgment and decision. He is pleased or displeased, possessed of such emotions as wrath, mercy and love. In popular belief, God is vaguely conceived as supernatural—as above the laws of nature created by Him. He is believed to transcend the world and to live somewhere up in the heavens. In philosophy, this supernaturalism is almost always rejected.

(3) God is all-perfect. He is eternal, infinite, omnipotent, omniscient, omnipresent and all-good. He is perfectly self-determined, and can will and do whatever He chooses. As the Quran puts it : "Allah is powerful over all things". Even the leaf of a tree cannot move without His consent. He is present everywhere and see all things that happen even in the darkest chambers of man's heart. He is supremely pure and holy, and the perfect embodiment of goodness.

(4) God is the ultimate source of values. He is the ground and conservator of all values—intellectual, aesthetic, moral and religious. Truth, beauty, goodness and holiness are all grounded in Him. He creates these values and realizes them through nature and man. Rudolf Otto adds another value to this list, namely, the 'numinous value.' God as a numen, i.e., as an awful mystery, is fascinating and holy in an incomprehensible sense. He is thus felt as the supreme object of desire.

(5) God is the supreme moral governor and guardian of justice. He is not only supremely good, but is all out to protect morality, righteousness and justice. None can win His favour except through carrying out His commands, through noble deeds and services to the cause of justice. He uprightly rewards the virtuous and punishes the vicious. Sufferings and

obstacles in the way of virtue are only His method of testing the spiritual strength of His devotees. If they can pass the test, they will be duly rewarded in the after-life.

(6) **God is an object of worship.** In virtue of His sublime qualities, God supremely deserves our esteem, praise and worship. "All praise is due to Allah", says the Quran, which emphasizes the worship of one God and of God alone. God not only deserves worship, but He commands man to worship Him, and is displeased if not worshipped. He listens to prayer and, when pleased, grants the boon prayed for.

Comments : All these contents of the idea of God are found in the higher theistic religions. Many, though not all, of them have been assimilated in the philosophical conceptions. But it may be noted that all these contents can be absorbed in a logical idea of God, if they are purged of anthropomorphism and sensuousness. Creation, for example, can be understood (following some philosophers) as a matter of God's self-manifestation through a process of emanation or evolution. God's consciousness and personality need not be taken as similar to ours. Even prayer can be regarded as meaningful and capable of effect, if Godhood and its relation to finite selves are given the appropriate kind of interpretation.

6. God and the world: Immanence and transcendence of God.

Philosophers have not only defined God, but tried to understand the precise relation between God and the world. The two tasks virtually involve each other. God is not fully understood without reference to His relation to the world. Religious conceptions of this relation are more or less vague, but they have been clarified and improved at the hand of the philosophers.

There are, however, four different answers to this question, viz., deism, pantheism, theism and panentheism.

7. Deism.

According to *deism*, God leaves the world to itself after creation. Thus God is fully transcendent and external. The case is analogous to the relation between a clock and a clock-maker. Although the clock is made by the clock-maker, it runs independently, and is interfered with by the maker only when it goes out of order. Similarly, God creates the world and endows it with necessary forces and laws of motion; and then the world goes on according to its own laws, God remaining outside the scene. But God intervenes whenever the world goes wrong, and sets it aright.

This view was developed by some thinkers of the seventeenth and early eighteenth centuries—namely, Toland, Collins, Tindal, Chubb, and others. They sought to eliminate dogmas implying supernaturalism, mysteries and external revelation, and base religion upon reason, with a view to justifying religion—particularly, Christianity.[4] Some other thinkers later on contributed to this position. Following Martineau, we may distinguish the following features in deism :

(1) Creation in time : God is eternal, whereas the world is created in time. The world will perish some day, but God will exist to eternity just as He did prior to creation.

(2) Distinction between First (primary) and Second (secondary) causes : During creation, God endowed the world with all necessary forces by which it can run normally without further divine interference. While God is the primary cause of the world, these forces are its secondary causes. The world is like a vast machine run by these secondary causes.

(3) Normally God does not interfere with the working of this machine. But whenever any crisis arises, He intervenes by special act of will in order to correct the irregularities. In the words of Dr. Armstrong, "God still watches the machine, and now and then, when He sees occasion, He interferes by a special act of divine power overcoming or suspending the action of natural forces by the introduction, for the emergency, of His own divine force. This intervention it is that constitutes miracles and special providences which are outside of the regular working of the machine."[5]

(4) Complete divine transcendence : God leaves the world to itself after creation, and lives undisturbed in His eternal bliss. He does not look after man's weal and woe, man's hopes and aspirations. Man himself is responsible for immorality and evil. Hence the relation between God and nature is one of perfect transcendence.

8. Criticism

Deism has been criticised in the following way :

(1) It seems to remove certain difficulties that usually attach to pantheism. Because God lives outside nature, He is not responsible for natural and moral evils. But this merit of deism is only apparent. God cannot be spared of responsibility, since the world is *His* creation. Being all-powerful, God might have made the world-machine so perfect that it could never go wrong.

(2) Deism cannot account for creation, and shares the difficulties associated with the theory of creation. If God is self-sufficient without a world, why at all did He create it? 'If God existed eternally without a

world', says Dr. Stephen, 'it is difficult to understand why He became active and creative at a particular point.' The very concept of creation has a ring of anthropomorphism. Modern science believes in evolution rather than creation.

(3) 'To an Eternal Being', observes Martineau, 'Eternal life, i.e., Eternal action must be an essential element of perfection: all cosmic power is will; and all cosmic will is His.... He is the One cause in Nature acting in various modes.'[6] If natural forces are divine energy, they cannot possibly work in absolute separation from God. The nature of causality demands that if the world is created by God, it must also be sustained by the same cause.

(4) Desim is inconsistent with divine perfection. Creation implies a feeling of want of whatever nature. Again, if God be fully transcendent, He becomes thereby limited by the world. But want and finitude are both traits of imperfection.

(5) Deism simply asserts, but cannot prove the existence of God. Cunningham points out that none of the traditional arguments for the existence of God applies to deism, except the argument from First Cause and the argument from design. But these arguments are not at all conclusive. Deism cannot also prove why God should leave the world to itself after creation. This and His occasional intervention are anthropomorphic and a poor analogy to human workmanship.

(6) Deism cannot satisfy the religious sentiment which seeks satisfaction in intimate relationship with God. If God has no concern with our moral struggle, no interest in our weal and woe, hopes and aspirations, He is of little botheration to man. He is hardly a God. In fact, deism has been ridiculed as the 'absentee landlord' theory.

9. Pantheism

Pantheism is the view according to which God and the world, the creator and the created, are identical. While in deism God is wholly transcendent, in pantheism God is wholly immanent. The word, pantheism, literally means 'all is God and God is all' (pan = all+theos =God). Every object is part and parcel of God, and every event a divine operation, an exercise of the divine will, or a manifestation of divine energy.

Probably, this image of God is never clearly and forcefully present in the popular mind.[7] Religious mysticism, though not very clearly and systematically developed, is pantheistic. In philosophy, pantheism is illustrated in Indian Brahmaism and in the teachings of the Eleatics and the Stoics, of Giordano Bruno (1548-1600), and so forth. Among the moderns, Spinoza is probably most famous for his systematic and vigorus panthestic

position.* Many great poets have also been pantheistic in their outlook.[8]

10. Criticism

Pantheism has usually been considered as having the following merits and defects.

Merits :

(1) Pantheism is free from the difficulties that logically attach to deism for its exclusive emphasis on transcendence. It provides a unified system of thought, preserves the infinity of God, and is free from the anthropomorphism latent in the concept of creation.

(2) Pantheism is consistent with the spirit of science. In fact, scientists are usually pantheistic in their attitude. It is a tendency of scientific thought to find God—if God there be—in nature itself, with its processes, activities and forces.' (Mead).

(3) Pantheism is palatable to the mystic's sentiments. It fulfils his need insofar as he longs for merging himself in the divine reality. "There was much that is practically attractive in old pantheism. It made for sweetness, sympathy and tolerance. For it, God was loved more consistently than for the old theism which portrayed God too often as an angry and vengeful Judge."[9]

(4) Pantheism is also optimistic and inspiring. It believes that the whole (i.e. God) is good, although the parts taken separately may appear to be evil. By making man part and parcel of God, it inspires him to cultivate the life of God, i.e., to attain to divinity through righteousness and altruism. As Dr. Flint puts it: 'The conqueror, the philosopher, the poet feels himself borne upwards, as it were, and along a path of glory and success, by the force of an indwelling God. The hours of highest achievement and joy are those in which man is frequently least conscious of his weakness and limitations as a man, and most prone to identify himself with God.'

Defects :

(1) The unity which pantheism establishes is an abstract unity which illegitimately excludes plurality. (Philosophical pantheism—of Spinoza, for example—is called 'abstract monism'.) Logic demanded Spinoza to stamp the world of finites as illusory. But this contradicts experience, which reveals a world of numberless objects as well as a society of distinct souls. Pantheism does not explain, but rather explains away the world of finites.

* For details see Chapter XV.

(2) If human individuals are identified with God, devotion and worship become meaningless. Thus pantheism cannot really satisfy the needs of religion. As Pringle-Pattison contends. "It takes two to love and to be loved, to worship and to be worshiped."[10] One cannot take sugar by becoming sugar.

(3) Pantheism implies determinism, and the unreality of finite personality. But these are most essential conditions of morality. Their denial renders moral obligation, guilt and retribution fictitious. If God is all, natural and moral evils either take away from His goodness or become illusory; either God becomes an inconsistent mixture of good and bad elements, or the distinction between good and evil disappears. In fact, pantheists have generally preferred the latter alternative. But the reality of evils it too obvious be denied.

(4) Theoretically, denial of freedom is likely to engender inactivity. It may also be an allurement to evil deeds and 'rationalisation' of one's guilts.

11. Theism

According to theism, God is neither fully immanent, nor fully transcendent; He is both immanent and transcendent. Thus theism is a synthesis of deism and pantheism. This is the view of almost all great religions, of the majority of religious thinkers and many great philosphers. Religion ascribes to God all sublime attributes, such as omnipotence and omniscience, and considers Him deeply interested in the affairs of the world. He is immanent insofar as the world is His creation and is directed and controlled by Him. But He is transcedent also, because He is infinitely more than His creation, and is other than nature including finite spirits. In philosophy, theism appears in different forms with diverse backgrounds in the systems of many great thinkers from Plato and Aristotle down to Bergson and Whitehead.

We find, however, a typical exposition of theism in Martineau. "Theism," he says, "is in no way committed to the doctrine of God as external to world, but is at liberty to regard all the cosmical forces as varieties of the method assumed by his conscious causality, and the whole of Nature as the evolution of his thought."[11] God is thus immanent. But His immanence is subject to two reservations : (i) 'It must not annex absorb the faculties of created minds, but leave room for their personality; (ii) though pervading the rest of the world, it must not stop at the cosmical limits, but spread beyond them as an infinite sea of possibilities, other than the realised legislation of reason, righteousness and love.' Hence God is immanent insofar as the world is the expression of divine nature;

traascendent insofar as (a) He is external to the finite spirits which are left free to work out their destiny, and (b) His infinite powers and potentialities are not exhausted in this finite world.

On the one hand, human spirits, being imperfect, cannot form part of the Divine Spirit. On the other hand, moral action is impossible without freedom. Hence, as a self-conscious person, God must transcend human personalities. Further, because the world is finite, infinite divine energy cannot be exhausted in its creation. God must, therefore, be more than His creation and ever remain an infinite fund of possibilities. The opposition between pantheism and theism, says Martineau, is an opposition between all-immanency and some-transcendency.

12. Comments

The word 'theism' has three different senses. In the ordinary (lexical) sense, it simply means 'belief in God'. Theism, in this sense, is opposed to *atheism* but not necessarily to deism and pantheism. In another sense, which may be called 'philosophical', it means a certain doctrine as to the relation between God and the world. In this sense theism is opposed to deism and pantheism as well as atheism. Theism in its third sense differs from philosophical theism only with regard to the *ground* of its opposition to deism and pantheism. According to theism in this sense, deism and pantheism contain a fundamentally wrong conception of the nature of God so that they are virtually equivalent to atheism. This is the sense in which theism is understood in the popular view and traditional monotheistic religions. Historically, philosophical theism has been closer and more agreeable to the popular religious sentiment than both deism and pantheism.

Critics, however, find the following merits and defects in philosophical theism.

Merits :

(1) Theism escapes the special disadvantages that attach to deism and pantheism. Pantheism cannot provide for freedom and morality. 'Theism, on the other hand, gives a free range to our moral wings and does not, at least need not, turn our moral values into a deception or illusion.'

(2) Theism leaves scope for the world of manifold finites. It recognises the reality of the human individual, and grants it a distinct and significant status. It is thus stimulating to man's higher aspirations and struggle for better existence.

Defects :

(1) But theism cannot, like deism, maintain the infinitude of God. If God transcends the finite spirits. He becomes limited thereby. It will not suffice to say that this limitation is but God's voluntary self-limitation, since, being infinite, even God Himself cannot limit His being. 'The transcendence and immanence of God', says Alexander, 'are postulated together without reconciliation.' The God of strict theism, he further remarks, is artificially related to His creatures.

(2) Theism seeks to save man's freedom, but its success is doubtful. Man is not and cannot be absolutely free. Man's will is bound by environmental conditions. Also, he cannot act against the divine will, without prejudice to God's perfection.

(3) Even by granting freedom to man, theism cannot solve the problem of evil. Nature being the expression of God, He is directly responsible for natural evils. Further, although man is free, God is also responsible for moral evils, since man is after all his own creation. As W.K. Wright points out:

"The old-fashioned theistic theologicians were never able to escape from such dilemmas as this: If God be all wise and powerful, he must have willed all that has come to pass, including human sinfulness, and the other evils and imperfections in the universe. But if He willed these evils and imperfections, He cannot be all wise and powerful."[12]

13. Panentheism

Like theism, panentheism also maintains that God is both immanent and transcendent. But it differs from theism in some important respects. According to panentheism, God is immanent, because the whole universe, including finite minds, is nothing but God's self-manifestation. God expresses and realises Himself in and through the world. But He is transcendent also, because He is infinite and, therefore, His potentialities are never fully realized in the finite world. Thus, all is in God (pan=all, en=in, theos=God), but God is not all. God, nature and finite spirits are organically related. God is not real apart from the world, nor the world apart from God. Although God works in and through the finite spirits, they are relatively independent and their reality is not fully absorbed in Him. Thus the infinite and the finite, the one and the many, are both true. God is a unity-in-plurality, or identity-in difference.

This view is a synthesis of theism and pantheism (and, through that, of all these views including deism). It is logically more subtle and more comprehensive than the other views. It is upheld, in various forms, by the absolute idealists, Hegel and his followers. In recent times, it has been upheld notably by Edward Caird, Pringle-Pattison and Josiah Royce.

14. Comments

(1) Panentheism is another name for Absolute Idealism of the usual type. Of late, all absolutism has been bitterly criticised by the pragmatists, neo-realists and existentialists. They reject the notion that the manifold finites have only a relative being and are essentially dependent upon the Absolute. The pragmatists and the existentialists are anti-intellectualists, and vigorously insist upon freedom and individuality. William James observes that the true relaiton between God and men is that of fellow-workers in a common cause, viz., the fight against evils.

(2) But these criticisms against absolutism are largely emotional. William James's view, for example, is intemperately pluralistic which contradicts the verdict of science as well. The world must have, and really does have, a unity, in which God and finites can have only an organic relation. Finite spirits are more or less free, but their freedom is only a level (the highest level so far) of God's self-realization. The organic relation between God and finite spirits means that God Himself is manifesting His power through their free activity. Divinity may be viewed as nothing separate from the freedom, value-consciousness and creativity of the concrete finite spirits.

(3) On the whole, panentheism seems to be more satisfactory than its rivals—deism, pantheism and theism. It is superior to deism, since it does not reduce God to a sleeping Deity. Unlike pantheism, it recognises the reality and importance of the world of finites. Unlike theism, it does not limit God by making Him external to finite spirits. It inspires the mind with the conviction that God is manifesting Himself through us and the supreme level of this manifestation is our free struggle for the good and war against evil.

(4) Of course, one thing remains in the dark. Can panentheism defend the all-goodness of God? Can it fully reconcile evil with His perfection? Panentheism may defend itself by saying that God need not be perfect in the traditional or orthodox sense. Divine perfection consists in His struggle towards perfection; it is ideal rather than actual.

[We may distingish between perfect-ness and perfect-ion. The former is a static, and the latter a dynamic property. The former implies inactivity, while the latter implies activity. God—in all conceptions, and rightly— is activity, change, evolution. His real perfection itself demands that He cannot be perfect in the static sense. Perfection is something to be achieved rather than possessed from eternity. Such static perfectness is spurious and excludes all possibilites of creation in any sense. One might argue in defence of panentheism in this way.]

15. A Comparative view of the four theories

The four theories as to the relation between God and the world have points of agreement as well as disagreement :

(a) While deism implies complete transcendence of God. pantheism implies complete immanence. Theism and panentheism, on the contrary, combine transcendence and immanence. Hence, in a way, they are the syntheses of deism and pantheism.

(b) But these syntheses are themselves different in important respects. In theism, God is immanent in Nature in the sense that God's will works through it; but God completely transcends finite spirits. In panentheim. God is immanent and transcendent in respect of both nature and finite spirits.

(c) While pantheism recognises the reality of the one and denies the reality of the many, panentheism recognises the reality of the many as well as the one. Pantheism is in philosophy called abstract monism, since it emphasizes the one in abstraction from the many. Panentheism, on the contrary, is known as concrete monism inasmuch as it insists on the concrete whole of the one and the many.

Two things, however, must be noted in this connection : (a) These theories are all monotheistic, but do not appear in any single homogeneous form. Views are grouped under any one of these, because they have some basic agreement, in spite of difference in details. Of course, this is nothing peculiar to these theories. (b) Commentators are not in perfect agreement on the classification of theories under these four heads. Most of them do not mention panentheism, but merges it with theism (or even pantheism).

Absolute idealism, for instance, is often treated as theistic. "In fact", says W.K.,Wright, "it is often difficult to-day to determine whether a writer really is a theist or a pantheist. Probably no philosophical theist believes that there ever was a time when there was no world, and that God then created it out of nothing; and no western pantheist thinks that God is indifferent to distinction between good and evil. The 'creative' evolution of the present-day theist cannot be much different from the 'immanent teleology' of a contemporary pantheist."[13] He regards the views of James and Royce as 'positions that are compromises between historic theism and historic pantheism.'

CHAPTER XXVI

BELIEF IN GOD

1. The problem

We have tried to understand what God is or can possibly be. But does He exist at all? Historically, and in some form or other, this has been the most important of all theoretic questions to many or most of the thinking minds. Answers to this question have been and are still various. Besides naive believers, there are the theists, atheists, and the agnostics. But such answers are often lost in a confusion of the very issue. The answering person does not always know what he exactly understands by God when he answers. This is unfortunate, since justice cannot be done to the question of the existence of a thing unless there is already a clear answer to the question about its essence. God may exist in one sense, and may not in another. Even a naturalist or a materialist may be said to believe in God, if God is somehow identified with nature.

In this respect, our position is quite favourable, since we have already considered the different conceptions of the nature of God. Our present task is two-fold. We shall first see how religious faith and philosophical atheism and theism have tried to justify themselves. Then, we shall consider how belief in the existence of evils can be reconciled with belief in the existence of God.

2. Faith vs. Atheism

Common believers entertain their faith naively. They receive the idea of God in their early childhood from their superiors and find little need or ability to examine it later on. There are two principal reasons for this. First, they are taught that to doubt or question any article of their own religious faith is a great sin. Secondly, their unsophisticated mind is highly suggestible and remains more or less hypnotized under propaganda, customs and ceremonials. As a rule, they do not argue or bother about proofs. If, however, they ever argue, they argue ususally along the lines of the traditional cosmological and teleological proofs. There is a God,

because otherwise there could not have been a world or so much of design and adjustment therein.

But their greatest stronghold in arguing is authority. God exists as our creator and supreme providence, because this has been taught by prophets and saints. Sometimes, particularly when in extreme miseries or suddenly shocked by ill-luck, they utter things which imply blasphemy or even doubt. But, on the whole, their faith is absolute, and their loyalty doubtless (in word, though not always in deed).

Diametrically opposed to them are the *atheists*, the non-believers. An atheist in one who does not believe in any God (except perhaps in the impersonal God of the pantheist). In other words, an antheist is one who denies the existence of God as conceived in religious or philosophical theism.[1]

The history of atheism is quite old. Religious stories from antiquity suggest that it is almost as old as faith. In the philosophical sphere, atheism is visible not only in modern thought, but also in old Indian and Greek speculation. It is associated with materialism and naturalism as their inevitable consequence. The Carvakas of ancient India are well-known for their atheism. The Atomists, Stoics and Epicureans of ancient Greece did not believe in God in the usual sense. In modern times, there are many renowned atheists, viz., Hobbes, J.S. Mill, Holbach, Feuerbach, Comte, Neitzsche, Karl Marx, Engels, and Santayana. The logical positivists, the communists in general, and most of the naturalists and existentialists of the current times are atheistic in their doctrine or attitude.

3. Arguments for Atheism

The different ways the atheists have argued from time to time may be summarized as follows :

(1) Atheism is implied by such metaphysical theories as mechanism, materialism and naturalism. If everything is matter and motion, or if every event is an invariable consequence of physical antecedents, there is no scope for the existence of any spiritual entity, of any primeval consciousness, purpose or ideal. God as a spiritual, personal creator cannot, therefore, exist. The arguments for mechanism, materialism and naturalism are, in effect, arguments for atheism.

(2) Many psychologists and philosophers have tried to show that faith in God is nothing supernatural. It arises from purely natural conditions—from wonder, fear, feeling of helplessness, imagination and wish-fulfilment. God is, in a word, a creation of man's imagination. Not that God has created man, but man has created God after his own image.

As a hypothesis, it has no doubt fulfilled certain basic needs of theoretic and practical life. But science has completely removed the necessity of that hypothesis.

(3) Belief in God has been useful, but it has harmed also. Numberless religions have divided men into numberless groups. They have led to mutual animosity, crusade, and bloodshed. Religion is full of superstitions, which have stood in the way of scientific and cultural progress. It is strange that two groups of men invoke the mercy of the same God in immoral fight against each other.

(4) There is no logical ground for belief in God. The theistic proofs are not convincing. The world does not require a so-called 'first cause'. Nor can God be inferred from design. There are numerous marks of deformity and maladjustment in nature. The world no longer requires a creator, since science has conclusively established the truth of evolution. Natural and moral evils explode our belief in a perfect all-good providence. "If God is perfect", said an Indian sage, "he had no need to create the world; if he is imperfect he is not God."

If there is a God then surely it seems he must be a devilish sort of creature. As Samuel Clemens expressed it: "A God who could make good children as well as bad, yet preferred to make bad ones; who could have made every one happy, yet never made a single happy one; who made them prize their bitter life, yet stingily cut it short....who frowns upon crimes, yet commits them all; who created man without invitation, then tried to shuffle the responsibility of man's acts upon the man, instead of honorably placing it where it belongs, upon Himself; and finally, with altogether divine obtuseness, invites this poor, abused slave to worship Him." What a God! "God's only excuse", asserted Stendhal, "is that he does not exist."[2]

(5) God's existence is said to be evidenced by revelations and miracles. Then, why have they stopped? If God were there, He ought to have convinced people by further revelations and miracles. Holbach argued that if there were really a God who is all-good and expects men to believe in Him, He would certainly have made Himself known in some absolutely unmistakable manner and not merely through improbable miracles and revelations.

4. Comments

All these arguments are not equally strong, and apply particularly to popular conceptions of God. In fact, one of the objections of the atheists is that the notion of God is anthropomorphic. These arguments have been criticised, and many of them found unsatisfactory or even frivolous. Brightman observes that most current disbelief in God seems to have arisen from neglect of the problem and from pre-occupation with other

interests. "Truly religious atheism," he says, "is to be found only where there is complete scepticism about any value in life. He who believes that there is nothing worthwhile is the thorough-going atheist."[3] Wright replies to Holbach's arguments, saying that God has actually revealed Himself to men, in the gradual experience of the race and in the private experiences of individuals.

Two things, however, may be noted in this connection : (a) The term 'atheism' is relative. Whether a man is an atheist or not depends upon how the nature of God is defined. There are many thinkers, besides those enumerated above as atheists, who will be regarded as atheists from the popular or orthodox standpoint. No philosopher, and also perhaps no man of modern scientific education, believes in a God who creates the world in six days, who speaks, hears, sees, thinks or decides as popularly believed. (b) Because atheism is associated with mechanism, materalism and naturalism, all charges against them apply to atheism. On the whole, atheism may have succeeded in refuting the ordinary anthropomorphic conception of God, but not in providing sufficient ground for disbelief in the God of a more sophisticated conception.

5. Theism : The Cosmological Argument for the existence of God*

Theistic philosophers have argued from time to time in support of their belief in God. They have found both popular faith and atheism unsatisfactory. The former is deficient because it is dogmatic and does not argue; and the latter is untenable because it argues wrongly. They have felt it necessary to justify faith on rational grounds in order to silence the atheist. Hence they have offered certain arguments for the existence of God. We shall now consider them one by one.

Let us first take up what is known as the cosmological argument.

(a) In its general form, the argument states that God exists as the *first cause* of the world. Any finite object is the effect of a cause; this cause is the effect of a further cause; this again is the effect of a more ultimate cause, and so on. We are thus led backwards to a first or self-caused cause. Otherwise we are involved in an infinite regress, which is absurd. God is this first cause, the ultimate self-sufficient ground of all beings. This argument is offered in sligthly different forms by St. Augustine, St. Anselm, Thomas Aquinas, Al-Farabi, Leibniz, Dr. Flint, and others.

This argument is also known as 'the first cause argument.' It claims that the causal series must have a first term, and this first term must be

* For a good treatment of the arguments the reader may consult Chapter V of *A Modern Introduction to Philosophy*, ed. by Edwards and Pap.

uncaused, since otherwise it cannot be the first term.

(b) Leibniz presents this argument in the following form. Every particular thing, he says, is 'contingent' in the sense that it would be logically possible for it not to exist. Hence the whole world, as a system of such contingent beings, is itself contingent. But there must be sufficient reason for whatever exists (his Principle of Sufficient Reason). The world, therefore, must have a sufficient reason outside itself. This sufficient reaosn is God.

6. Comments

(1) Bertrand Russell points out that the argument in its first general form rests on the assumption that every series must have a first term. But this is false; "for example, the series of proper fractions has no first term."[4]

(2) The general allegation against this argument is two-fold. First, to end the causal series at a first cause is arbitrary. If nothing comes out of nothing, we can legitimately ask about the cause of this so-called first cause. Secondly, if we could stop at God as the first cause, we could equally stop at the world as self-caused. If God could be eternal, there is no reason why the world could not.

(3) Kant argued that the concept of causality applies only to phenomena, not to things-in-themselves or God.

(4) Both Caird and Iqbal maintain that the argument renders God finite and relative. The infinite that it demonstrates is not genuine. Iqbal contends that the first cause reached by the argument necessarily excludes its effect; and this means that the effect, constituting a limit to its own cause, reduces it to something finite. "The argument really tries to reach the infinite by merely negating the finite. But the infinite reached by contradicting the finite is a false infinite, which neither explains itself nor the finite which is thus made to stand in opposition to the infinite. The true infinite does not exclude the finite; it embraces the finite without effacing its finitude and explains and justifies its being. Logically speaking, then, the movement from the finite to the infinite as embodied in the cosmological argument is quite illegitimate, and the argument fails in *toto*."[5]

(5) Russell observes that the Leibnizian form of the argument is better and more difficult to refute than its first-cause form. But, after all, this can be refuted. It is true that whatever is contingent and relative must be dependent upon something necessary and absolute. But this necessary and absolute being need not be other than the world. A particular object may be contingent when taken alone; but the system of particulars in the world as a totality may be self-sufficient and absolute.

7. The Causal Arguments

(a) Descartes argued that God exists as the cause of the idea of God in us and also as the cause of our own being. First, the idea of God is the idea of a perfect being. Causality demands that the ultimate cause of an idea must be a substance (and not another idea) which contains at least as much perfection as contained in the idea. But a man or any finite being is imperfect. Hence the cause of the idea of God must be God Himself. In fact, the idea of God is an 'innate' idea which God has placed in our mind as a mark of His workmanship.

Secondly, we cannot be created by ourselves, or by our parents, or by any being less perfect than God. If we ourselves were our cause, we would have made ourselves perfect, since we have the idea of perfection. Again, if our parents were our cause, they would have been able to sustain us, which is not the case. In brief, ultimate causality does not belong to any finite and imperfect being, but to God alone.

(b) Martineau argues for God's existence from an analysis of the very nature of causality. The full idea of causality involves the notions of substantiality, power, efficiency, energy, direction, etc. Such causality is directly experienced only within our mental life. In fact, causality is mental; it is an exercise of will-power. Hence there must be a self-existent and conscious mind as the cause of the world and all that happens in it. This mind is God.

8. Comments

(1) Descartes claims that from our being and possession of the idea of a perfect being the existence of God 'is most clearly demonstrated'. The first part of his argument turns around the innateness of the idea of God. But Locke showed that there is no innate idea. An imperfect being, says Descartes, cannot cause or produce a perfect being. But that he cannot produce even the *idea* of a perfect being is an illogical postulate. It is based upon Descartes' notion of causality which is not fully correct.

(2) The second part of the argument is at bottom only another form of the cosmological argument. It is therefore subject to the defects of that argument. It is true that we are not produced by ourselves or by our parents. But our ultimate cause need not be an all-perfect spiritual being like God. It may be the world which is not perfect in the usual sense (cf. emergent evolution).

(3) Martineau's argument is an argument from analogy. To a naturalist, this is a bad analogy, and its order should be reversed. That is, we should not pass from mind to nature, but from nature to mind, and explain mind as

something mechnical. But neither of these transitions seems satisfactory. In brief, this argument has a great force, provided we do not regard the cosmic mind as exactly identical in nature with our conscious mind. There is sufficient ground for belief in God as a tendency or nisus in all motion and change towards the emergence of the better and the nobler

9. The Ontological Argument

The ontological argument tries to deduce the existence of God from the very concept of God. It claims to show that the very definition of God implies His existence. This argument was first put forward by St. Anselm. Later on, Descartes and Leibniz presented the argument in slightly modified forms.

(a) St. Anselm argued that the idea of God is the idea of the greatest possible object of thought. Now, of any two exactly alike objects of thought, the one which exists is greater than the other one which does not; since it possesses a further perfection, viz., existence. Hence God must exist, because otherwise a greater being than God would be possible.

(b) Descartes argued that God must exist, because it is self-contradictory to think that an all-perfect being does not exist. It is clear that "the existence can no more be separated from the essence of God than the idea of a mountain from that of a valley, or the quality of its three angles being equal to two right angles, from the essence of a traingle." God's existence is a necessity of thought. It is necessarily implied by the very definition of God.

[It may be objected that the inseparableness of mountain and valley does not mean that there is a real mountain, and so with God's essence and existence. But the two cases are not analogous. In the latter instance of inseparableness, one term is 'existence'. In fact, here the necessity of being imposes necessity of thought, and not conversely, We are bound by the necessity of God's exsistence to think that He exists. (Meditation III)]

(c) Leibniz accepts the main point of the ontological argument, but thinks that the argument is inconclusive unless it is proved that God as the subject of all perfections is possible. He proves that God is possible by demonstrating that the idea of God is free from self-contradiction. He argues that no perfection as a simple, positive and absolute quality (which expresses without any limits whatever it does express) is necessarily in conflict with any other perfection. Hence there is no contradiction in the idea of God, and God is possible. Existence, being one of these perfections, is necessarily a predicate of God. God, therefore, exists.

10. Comments

(1) The first attack on the ontological argument came from the monk

Gaunilo, a contemporary of Anselm. He said that if the idea of a perfect being implies its existence, the idea of a perfect island must imply the existence of such an island. It was also rejected by Thomas Aquinas. He argued that if we know God's essence, His existence would become self-evident, since the two are one; but no creature knows enough of God's essence to be able to deduce His existence.

(2) Kant said that the mere idea of the existence of a thing does not imply its real existence. From thought we cannot pass to thing. The mere idea of 300 dollars in my mind cannot prove that there are really 300 dollars in my pocket. All that the argument can prove is that the *idea* of perfection implies the *idea* of existence. In fact, perfection may be mentally predicated of a subject, but existence is not a predicate. All judgments about existence are synthetic and cannot be derived *a priori* by an analysis of concepts.

No doubt that we can pass from 'logical' necessity to reality or 'factual' necessity in the sense that if the existence of a thing is logically necesary, the thing must actually exist. But is the existence of a perfect being logically necessary? First of all, a perfect being does not appear to be possible. If God is other than the world, He is finite; if He is within the world, He must share its imperfection. There are numerous marks of imperfection in the world. Hence in either case God is imperfect in the traditional sense. In the next place, Kant rightly contends that existence is not a predicate. Hence any notion of perfection as a predicate must exclude existence. Consequently, an analysis of the notion of perfection cannot itself demonstrate the existence of a perfect being; we must look elsewhere. Kant's criticism of the ontological argument seems final.

Russell, however, aptly observes : 'The argument does not, to a modern mind, seem very convincing, but it is easier to feel convinced that it must be fallacious than it is to find out precisely where the fallacy lies.'[6] Further, it is to be kept in mind that refutation of any particular argument for the existence of God or even a failure to provide any proof of God's existence is not by itself a proof of atheism.

11. The teleological argument

The teleological argument is that God's existence can be validly inferred from the apparent marks of intelligent design, benevolent purpose, adaptation and harmony in nature. This argument has been applied notably by the Stoics of early Greece, by Thomas Aquinas, Berkeley, Leibniz, William Paley and Martineau. In its general form, it contends that such things as design, purpose, adaptation etc. can be initiated only by a mind; hence there must a God or a univeral mind as the source of these qualities in the workings of nature.

(a) Leibniz argued that all the monads of the world are like so many clocks running in perfect harmony. But, being windowless, monads cannot affect one another. Hence this harmony must have been established by God at the time of creation (his doctrine of pre-established harmony.)

(b) William Paley argued that from the evidences of design in a watch we can infer that it has been fashioned by an intelligent cratfsman. There are marks of design in nature, which suggest that the machine of the world has been fashioned by a superhuman watchmaker.

(c) Martineau contends that selection, combination and gradation are the marks of intelligent design. The products of a rational mind can be recognised by these criteria. Nature displays inummerable evidences of selection, combination and gradation. For example, different types of things such as the mountains, oceans, plants and animals are made of selected materials and adapted to one another in a definite order. Hence the author of nature must be a being of infinite intelligence, i.e., God.*

12. Comments

(1) Carneades, the sceptic of early Greece, criticised the teleologcial argument of the Stoics, saying that the world is not rational, beautiful and good. Even if it were so, that would not prove that it is made by God. The idea of God is full of contradictions. If God is good, He is not supreme, since He is *determined* by the moral law. If He is bad, He is inferior to man and hence not a God.

(2) "This argument." says Kant, "always deserves to be mentioned with respect. It is the oldest, the clearest, and that most in conformity with the common reason of humanity." But it is "utterly insufficient for the task before us—a demonstration of the existence of an all-sufficient being."[7] At best it can prove the existence of a divine *architect*, who imposes his design upon pre-existing matter. But it cannot prove God as the creator of matter. It is ultimately based upon the ontological argument which is itself unsound.

(3) This is an argument from analogy, but from bad analogy, for two reasons. First, as Hume points out, there is a great difference between the universe and the humann products, such as houses and machines; and inferring similar causes from a slight similarity in effects is not justified. Secondly, the argument does not take account of 'negative instances'—that is, the cases of maladaptation, frustration and disharmony in nature.

(4) Naturalists prefer to explain the design in nature by natural rather than supernatural causes. It is argued that such explanations are not only possible and supported by experience, but also consistent with the law of parsimony. A hypothesis which is simpler and involves fewer assumptions is perferable to a complex one.

(5) W. K. Wright regards this argument as the strongest of all, but not exactly a 'proof'. Teleological evidence merely indicates the *probable*

* For details on marks of design see Chapter XIII.

existence of a mind working in nature. "As a matter of pure probability and intrinsic reasonableness," he asks, "is it not a great deal more thinkable that the evolution of a teleological and moral universe has been attended by a conscious mind than that it has gone on simply of itself without such a mind?"[8]

In brief, the argument undoubtedly has great weight. Facts of emergence, adaptation and progress strongly suggest that the world is governed by intelligent forces. But the God of the ordinary theistic conception is much more than a merely intelligent agent. Such a God cannot be said to have been 'proved' by this argument.

13. The Moral Argument

The moral argument presents the facts of our moral experience as the ground of our belief in God. In its general form, it states that moral values are objective because they are essential qualities of human nature and human nature is real. Moral values thus become part and parcel of the universe; in other words, the universe is essentially a moral order. This implies the existence of God as the conscious and rational governor of the world. This is evidenced also by the history of man's moral struggle and progressive moral achievement. In this general form, this argument is advanced by the objective idealists.

(a) Martineau argues that God exists as the source of moral obligaiton. The moral law is obligatory on us. We are not its source, because we cannot annul it as we please. Society and state can only impose physical but not moral obligations. Hence an eternal and infinite spirit, namely, God, is the real source and ground of the moral law. God's existence follows also from the hierarchy of moral beings. Some men are more moral than others. Hence, there must be a most moral being, who is the culmination of moral perfection.

(b) It is also argued (e.g., by James Seth) that God exists as the real fulfilment of the moral ideal. Being infinite, the moral ideal cannot be fully realised in the finite life of man. But it loses its significance, if it is unrealisable or remains unrealised. Hence God exists.

(c) Kant believes in God as a necessary postulate of morality. Reason demands that virtue should be duly rewarded and vice duly punished. The highest good is virtue, but the complete good is vritue in harmony with happiness. Men should be happy or unhappy proportionately to their vritue or vice. But this is not the actual case in this life. Hence God must exist as the ultimate judge who will proportionately adjust happiness to virtue and unhappiness to vice in a future life.

14. Comments

(1) Our moral experiences are quite objective and significant. And they seem to suggest that the world is not out and out matter understood as a lifeless or mindless and meaningless stuff. The world has spiritual and axiological aspects which consist in its inherent tendency or nisus to evolve and realize the higher values.

This spiritual aspect may be called 'divine'; but it is not a distinct personal and spiritual entity, a mind *added* to the physical world. Much less is it God as ordinarily conceived. Perhaps the moral arguments cannot prove anything beyond this.

(2) Morality is nothing other than rationality in the sphere of conduct—particularly, social conduct.* If logical obligations can be objective without a divine basis. moral obligations also can. Rather, moral obligations are independent and impersonal like logical obligations. We understand and accept that because 'A is as tall as B and B is as tall as C', therefore, 'A is as tall as C' without a God. The same is true of moral principles. We understand, for instance, that to tell a lie is immoral, because it is unreasonable. Further, the moral ideal need not be realisable or realised in order to be objective, just as man need not always think logically in order that the logical principles may be objective and valid.

(3) Kant's postulate that virtue must be harmonised with happiness is not acceptable. It is not logically necessary; it is rather self-contradictory. Virtue, according to him, is the good or rational will which excludes all inclinations, feelings and desires. But happiness springs from the gratification of desires. Hence, on his own premise, virtue cannot or need not be harmonized with happiness.

(4) Proportionate adjustment of virtue and happiness is possible without God. A machine is often more accurate than a mind. If God should harmonize virtue and happiness, it is not understood why he should not do it in this life. Pringle-Pattison is perhaps right when he observes that Kant reduces God to the status of a pay-master. "Moreover", says W.K. Wright, "this argument has to assume a *completely* moral universe." But "if this is a universe in which good is only gradually coming to prevail, the evils and injustices of the world may be indications that the world is not perfect."[9]

15. Pragmatic arguments

According to the pragmatists, the existenc of God is proved by the fact that belief in God is highly useful in our life. Ideas are verified by their workability or practical satisfactoriness. The idea of God is a great source

* Cf. our view of the moral standard developed in Chapter XXVII.

of satisfaction and an effective stimulus to the struggle for noble living. The idea of God, therefore, works. Hence God exists.

William James contends that the option between belief in God and going without that belief is a *genuine* option, i.e., a living and momentous option, which cannot be avoided. If we believe in God and if God exists, we gain much; if God does not exist we lose little. On the contrary, if we go without belief and God exists, we lose very much. Shall we risk error by believing, or risk loss by going without belief? The first alternative, says James, is much better.[10]

16. Comments

(1) The pragmatic argument stands or falls with the pragmatists' general conception of truth. The pragmatic notion of truth (as we have seen) is unsatisfactory. True beliefs may often work, but not *always*. Again, even if all true beliefs work, we cannot convert the statement and say that all beliefs which work are true. Hence, at any rate, the pragmatic proof is not logically adequate.

(2) The argument is alleged to commit two serious fallacies. First, it commits the fallacy of non-observation, because it ignores the 'negative instances'. Many noble lives have been built without faith in God. Moreover, in numberless cases, the belief has been a source of stoicising otherworldliness, misery, crime, and even bloodshed. Secondly, it commits the fallacy of *post hoc ergo propter hoc*. The apparent good effects of the God-idea may really be due to some other conditions.

(3) Russell makes certain more drastic observations. He refers to William James's contention that if the hypothesis of God works satisfactorily it is true. "This", he says, "simply omits as unimportant the question whether God really is in His heaven; if He is a useful hypothesis, that is enough. God the Architect of the Cosmos is forgotten; all that is remembered is belief in God, and its effects upon the creatures inhabiting our petty planet. No wonder the Pope condemned the pragmatic defence of religion."[11]

(4) The argument is indeed inconsistent with the general religious attitude. Man longs for a *real* God. He does not believe in order to be happy; rather, he is happy because he believes.[12]

[It must, however, be noted that to his pragmatic argument Willam James adds empirical evidence. By an analysis of various religious experiences he tries to show that the human consciousness is continuous with a 'wider' self, an unseen region which is real for it produces effects in this world.]

17. God and Evil

God is believed to be not only the ultimate cause of the world but also

its care-taker and moral governor. God is not only all-powerful, but is all-good. He is the supreme Providence, i.e., the deity who foresees the future and regulates the course of events in such a way as to ensure the final triumph of good over evil. If so, how to reconcile the existence of evils with our belief in God? There are evils of two broad types—natural and moral. But if God is good, His whole creation ought to be good as well. Then, how could there be any evils at all? The question is at once important and interesting, and different answers to it have been offered.

In the popular view, natural evils such as earthquakes, cyclones, floods, hurricanes, epidemics, etc., are due to God's will. God intends them either in order to express His power or to punish the sinners. For moral evils such as fraud, theft, falsehood, murder, adultery, etc., man himself is responsible. God has given man freedom of action and the necessary capacity for choosing between right and wrong. Either from mere habit or from vicious motives, man sometimes freely chooses the wrong. And hence man, and not God, is to answer for moral evils.

Orthodox faith adds to this that there is an evil spirit, the Satan or the Devil, which is ever alluring man to sin. God has repeatedly cautioned man against the Satan's allurements through His prophets, and also equipped man with all necessary powers to resist such allurements. But man does not care, and must therefore suffer in the hell.

Ditheism offers a simpler explanation. God is all-good, but not all-powerful. He is fighting hard against an evil deity for the triumph of good over evil. But He is not always successful. All evils are due to that evil diety.

In philosophy, the dualism of Plato and Aristotle ascribed evils to matter. Plato ascribed all goods to the Idea of Good, and Aristotle to God. But they both believed in matter. Matter, according to them, is passive, but resists the activity of God and the Idea of Good. Hence all evils are due to matter. Later on (in the third century A.D.), this view appears in a theological doctrine known as Manicheism after the name of its propounder Mani or Manes.

Pantheism explains away the distinction between good and evil as illusory. 'We know assuredly nothing to be good', said Spinoza, 'save what helps, nothing to be evil save what hinders, understanding.' Since all things are God, good and evil, truth and falsehood, morality and immorality are alike in Him. In fact, such distinctions have no ultimate validity.

Deism regards natural evils as due to secondary causes in nature and moral evils as due to man's free choice. The *theistic* answer assumes various forms. Leibniz maintained that evils are the necessary consequences of the finitude of the world, but they are instrumental to the moral education of

man. 'Afflictions,' says Leibniz, 'are for the time being evil, but in effect good, since they are short-cuts to a greater perfection.' The world has been chosen and created by God as the best of all possible worlds.

Martineau argues that God permits evil in order to make morality possible. It is because He is Holy and cannot be content with an unmoral world where all the perfection is given and none is earned, that He refuses to render guilt impossible and inward harmony mechanical. Professor Mackintosh thinks that both moral and non-moral evils are due to 'free creativity with which the divine creator originally endowed life even in its most primordial and rudimentary forms.' It has also been suggested that evils may be means to the good of beings other than men, or to some unknown good. At any rate, either God does not produce the evils Himself, or He produces them for some better and more ultimate purpose which we may or may not know.

The panentheists or absolute idealists, such as Hegel, maintain that evils are not illusory but only contingent and relative. The whole alone is truly good. What appears to us as an evils is only a means to the realisation of this whole cosmic good. All evils are thus incomplete goods; what is real is rational. Josiah Royce holds that evils are necessary for the trimph of the good. Just as there have to be strident notes in a symphony to make possible its harmony as a whole, so there must be evils in the world, both physical and mental, in order that it may be overcome in the universal harmony. In Bradley's opinion, God is a mere appearance of the Absolute, the ultimate reality, and there is a balance of pleasure over pain in the Absolute.

Pragmatists, such as William James and Schiller, have tried to explain evils by the conception of a finite God. James, for example, contends that the evils cannot be dismissed as unreal, but they can be reconciled with belief in God only if we conceive God as of limited knowledge and power. God is fighting evils with man's co-operaiton, and there is great hope that He will be victorious if we co-operate faithfully. Similar views have been expressed by some other thinkers, e.g., Hobhouse and Rashdall.

18. Criticism

(1) None of these views seems fully satisfactory. The existence of evils cannot be denied. That the world is imperfect is evident. It is also true that the existence of evils cannot be reconciled with the notion of a creator who is both all-powerful and all-good. The only possible attempt at such a reconciliation is to regard the evils as instrumental to the higher ends which God sets to Himself. But at least some evils are apparenlty superfluous or misplaced. To say that God's ways are 'unknowable' is an agnosticism which

evades rather than solve the problem. Hence, the only plausible solution is to look upon God as limited in power, though unlimited in His goodness.

(2) But the pragmatist's presentation of this solution smacks of anthropomorphism. William James speaks as if God co-operates with human beings much like another human being. This difficulty disappears or at least diminishes if we take a certain view of the real nature of God. One could say that God does not exist as a separate personal entity but only as a tendency to evolve the higher and the better. As W.K. Wright observes, "it seems more in accordance with the facts not to claim that the world as a whole is perfect, but merely that there is a teleological principle in it, that tends to be increasingly but not invariably successful."[13]

(3) Evils exist only in relation to consciousness. Natural evils are mere natural phenomena unless they harm conscious beings which seek to avoid them in order to preserve themselves. God's fight against natural evils may, in the main, mean nothing but man's efforts to overcome them by a control of natural forces. God's resistance to moral evils may only mean the moralising and reformative endeavours on the part of the nobler section of humanity. God, in this sense, i.e., God as a moral force and an inherent cosmic nisus towards the higher and the better, is quite a reality and is well worth the name. In any other sense, as it appears, God is either a mere hypothesis or even a contradiction in terms.

This conception of the relation between God and evil is not only in conformity with experience as far as it goes, but has great practical value. The belief that God is working in and through us and that evils can be successfully fought by human efforts, has been the principal source of inspiration to man in his struggle for betterment.

PART IX

ETHICS AND THE PHILOSOPHY OF LIFE

CHAPTER XXVII

SUCCESSFUL LIVING : END AND MEANS

1. Is Life worth living?

So long we have tried to understand the real nature of the world, the nature of our existence and the enviornment we live in. We have also tried to define and assess the metaphysical status of what are known as the higher values. We are, therefore, in a position to ponder over our life itself, to consider the supreme goal towards which it is or should be directed, and discover the best means to that end. Our toilsome theorizing in the preceding branches of philosophy is intended virtually as a preparation for this final stage of philosophising. It is here that philosophy bears most directly upon practical life, and without it philosophy remains miserably incomplete. But just as philosophy without life is incomplete, so also is life without philosophy. "It is the bounty of nature". said Seneca, "that we live, but of philosophy that we live well; which is, in truth, a greater benefit than life itself."

But is life at all worth living? This is the most primary of all questions. While no special science is interested in this most vital question, the popular answers to it are more or less unsatisfactory. Countless men and women have lived and are struggling to live, and to them life is certainly worth living. Yet, there are hundreds of suicides to whom life is entirely worthless. Common people pass inconsistent remarks on the worth or unworth of life, because they do not give sufficient thought to the question. Sometimes they consider life worthy, because it satisfies certain desires which are not really worthy; sometimes they despair because it does not satisfy those desires. In fact, most of them do not take the question seriously. Let us, therefore, turn to the philosophers for a well-considered answer.

2. Pessimism, Optimism and Meliorism*

Pessimism is the theory that the world is essentially evil and life is not

* 'Pessimism' from Lat. 'pessimus'=the worst; 'optimism' from Lat. 'optimus'=the best ; 'meliorism' (coined by George Eliot) from Lat. 'melior'=better.

worth living. Evil is all in all, and the goods that exist are either apparent or only instrumental to evil. There is no real worth or real charm in our life. The pessimist's attitude is one of gloom, melancholy, despair and unqualified contempt for life and the world in general.

Pessimism is visible in the works of some great poets and litterateurs, such as Hesiod, Omar Khayyam, Byron, Leopardi and James Thomson.[1] "I came like water," said Khayyam, "and like wind I go." Among philosophers, we may mention Buddha, Schopenhauer, Hartman and Spengler. The existence of evils is one of the four noble truths of Buddha, and he preached the cult of 'nirvana'. Schopenhauer (1788-1860) is described as 'the prince of pessimists' or 'the teacher of pessimists'.In his famous work, *The World as Will and Idea,* he tries to show that this is the worst of all possible worlds. The ultimate reality is Will, and hence the world must be a place of suffering. Will implies want and want is never fully satisfied. Our wishes often conflict, and for every wish that is satisfied there remain ten that are unsatisfied. Desire is infinite, while the fulfilment of our desires is 'like the alms thrown to a beggar, that keeps him alive to-day in order that his misery may be prolonged to-morrow' Hence, human life is all but a mistake and the final redemption of mankind lies in stopping reproduction.

Optimism is the direct opposite of pessimism. The optimist believes that the world is essentially good and that every evil is either unreal or only instrumental to good. There is real value and real charm in life. The world-process is determined by good and there is real ground for an attitude of hope and cheerfulness.

In both philosophy and literature, optimism is the rule and pessimism the exception. Whitman, Rouseau, Rabindranath and Alexander Pope are great literary optimists. 'I do not like to die in this beautiful world', so sung Rabindranath, 'and I wish to live amidst men!' Theology is through and through optimistic. In philosophy, Leibniz is the best-known optimist. In his *Theodicy* he shows by logical arguments that this is the best of all possible worlds. Order amid diversity or unity in plurality is the essence of beauty and perfection. There is perfect order and harmony in this world (pre-established harmony). Nothing is wanting in it, or nothing is superfluous. God's choice of the world is determined wholly by the law of fitness. Bruno and Berkeley may be cited as other great optimists. Berkeley contends that we take the idea of some one particular pain and call it evil, 'but things which, considered in themselves, appear to be evil, have the nature of good, when considered as linked with the whole system of things'.[2]

Meliorism is a position mid-way between these two extremes. According to it, both good and evil are real. The world is neither the worst possible nor the best possible one; it is both good and bad. But good in it is dominant and it is always susceptible of improvement. In fact, the world is getting better gradually, which is evident from biological and social evolution.

This view is advocated by William James, H.G. Wells, R.B. Perry, and many others. "In spite of all the confusions and thwartings of life, the halts and resiliencies and the counter-strokes of fate," says Wells in his *New Worlds for Old*, "it is manifest that in the long run, human life becomes broader than it was, gentler than it was, finer and deeper. On the whole—and now-a-days almost steadily—things *get better.* There is a secular amelioration of life, and it is brought about by Good Will working through the efforts of men.... The world is now a better place for a common man than ever it was before, the spectacle wider and richer and deeper and more charged with hope and promise."

3. Comments : Life is worth living

Pessimism and optimism, being extreme and one-sided, are both mistaken. They are correct only insofar as pessimism says that the world could be much better and optimism says that the world could be much worse. In fact, the world abounds in both goods and evils. Natural and physical evils such as cyclones, earthquakes, floods, diseases and pains, and moral evils such as theft, fraud, murder and war are living facts. But there is another side to the picture, and that is wider, stronger and more important. There is much more of goods than evils. In brief, good seems to be the rule and evil the exception; and when pessimism preponderates, the reason is that exceptions are usually more attractive.

Pessimism and optimism are very much a matter of temperament. The truth lies in their synthesis, viz., meliorism. The world has continually grown better, and that through human efforts. When someone gets lost in exclusive pessimism or exclusive optimism, he is really mistaken. Man's noble responsibility and unique capacity lies in a relentless war against fate and sincere efforts for the improvement of his lot. That life is worth living is evident from the very fact that man does not like to die even amidst severe hardship.

"Be not afraid of life." So says William James, 'Believe that life is worth living, and your belief will help create the fact."[3] That life is short or that there are evils can be no argument against the worth of life. First. the worth of a thing is not to be measured merely by its size. Secondly.

evils too seem to have a contribution to our appreciation and enjoyment of goods. Health is better enjoyed immediately after recovery from illness.*

We have sentimental as well as logical grounds for belief in the value of life. The satiation of our biological needs, emotional satisfactions, relations of love and affection are perennial sources of pleasure. Further, life affords a scope for the realisation of our higher values such as truth, beauty and goodness. Hence life cannot be considered worthless, unless these values are denied intrinsic worth.

There are, no doubt, pains and sufferings in life. But if we have seen the sea and the sky, or exchanged love and sympathy even only once, that is perhaps enough compensation for much of our suffering. Contentment is the real key to happiness. We should not be greedy not only about food and drink but even about love and affection—indeed, about anything. Let us be contented with what nature in her limits and chains of law can afford or what we can attain by our best efforts. Perhaps life will then appear worth living.[4]

4. The Summum Bonum

Life is worth living, but not *any* life. The value and significance of a life depends upon the goal towards which it moves. Only rational beings like us are capable of a critical choice and clear consciousness of that goal. Our superiority and excellence, if any, consists in the quality of the goal of our life and our capacity for voluntary striving towards that. What, then, is the real goal of our life?

There does not seem to be a single simple goal for us to seek. Obviously our supreme goal or highest good (summum bonum) is rationality, but our total good is a complex whole made of both rational and non-rational factors. Rationality is the only independent (absolute) and intrinsic value, which cannot be denied without self-contradiction. Before all and above all, we shall be rational beings. But rationality must be sought in concrete situations, in multifarious activities. These activities have an immediate end, viz., happiness. That is, our total good consists in being rational in our search for happiness. This happiness is the non-rational factor, since there is no logic either for or against it. We cannot logically argue why we shall be happy or why we shall not.

Rationality or reason as our basic ideal may better be called the 'guiding or governing value' of our life. It constitutes an 'end' only in so far as our immediate end of happiness, in order to be valid, must harmonise with it. But happiness also is not realised in the abstract but in seeking some

* This, of course, does not *justify* the existence of evils, or of all evils; nor does it unconditionally render evils indispensable to enjoyment or happiness.

more immediate ends, and these ends are the most concrete, most direct and most lively goals towards which our activities are directed.

Our conscience or moral sense is no other than practical reason, and morality is not a separate value. Morality is nothing but the rationality of action. Thus understood, morality may be said to be the rational element, and our particular immediate ends the non-rational elements of our 'total good.'

These particular ends are, however, of various kinds, according as we have various drives and interests, innate or acquired. Happiness derives from the satisfaction of these drives, and in fact we are endowed with different faculties or organs to satisfy them, partly or fully. With morality or rationality as our *primary* value, we may call these ends *secondary* values. But under morality itself we may enumerate certain particular *sub-values* such as truthfulness, justice, honesty, etc. (which are nothing but different forms of the same moral value). Reason directly dictates these values; that is, these values directly follow from rationality or morality. The secondary values are not dictated by reason, except insofar as they are indispensable to the realisation of the moral values; but they must be censored by the same.

Thus, in beief, our total good may be said to consist of the following values:

Primary or governing value : Rationality (Reasonableness).

Secondary values :

1. Physical— Food, health, sensuous pleasures, strength, vitality, longevity, etc.
2. Intellectual— Truth (true knowledge), freedom from ignorance or error, literacy, science, philosophy, etc.
3. Moral— Justice or fairness, honesty, truthfulness, etc.
4. Aesthetic— Beauty in all forms: various arts such as poetry, music, painting, decorum, etc.
5. Social— Different rights (with corresponding obligations) : right to life or self-defence; right to self respect, self-determination, freedom of thought, freedom of expression; right to association, peace or peaceful co-existence, etc.
6. Sentimental— Love, affection, friendship, sympathy, charity, courage, power, fame or glory, creativity, love of God, worship, etc.*

* Also read—Note 5 to Chap. XXVII.

[All these values, primary and secondary, moral and non-moral, may be brought under the grand notion of a single value, viz., Humanity. Divinity is only infinite humanity, and humanity finite divinity. Such is actually the concept of divinity evolved through ages. Some of the attributes ascribed to God are rational, and others non-rational (cf.Otto). God is imagined as the perfect embodiment of truth, beauty and goodness, as of infinite power and wisdom, as living in eternal bliss.

Thus, in fine, the supreme total good towards which man moves may be said to be *humanity*. But man has not been contented with bare humanity. His persistent struggle has been to pass from animality to humanity and from bare humanity to divinity. His search for and devotion to God is in fact his struggle for 'becoming' God, i.e., becoming His true image. He may not have succeeded, but that is the supreme ideal to which the nobler section of mankind has tried to attain.]

5. Good vs. Successful life

Morality is the rational way to non-rational goals. By 'goodness' we shall understand simply our obedience to the moral law (the realisation of our primary moral values alone); by 'success' the actual realisation of our total good. Hence, the goodness and the success of our life need not harmonise. That is, goodness and success may be present or absent in different degrees in the same life. For example, a poor and uneducated man may have a will to live a moral life, but for lack of training he may fail to conform perfectly to the moral principles. Further, it is obvious that he cannot realize all the secondary values. He is incapable of science and philosophy and deprived of higher artistic enjoyments. Circumstances may even deny him regular meals. On the contrary, a wealthy and learned fellow may realize the secondary values to a very high degree, but without due attention to the moral principles.

But the true 'success' and glory of human life consists in the right harmony of goodness and the actual realization of the secondary values. We should try to succeed as far as possible, i.e., attain more and more of happiness, but only in the good (i.e., rational) way.[5]

6. Moral pirnciples

But what is the moral law itself? Or, what are the moral principles? Morality, as we have seen, does not dictate our immediate ends, except in so far as they are demanded by the moral values themselves. Longevity, for example, is in itself a non-rational end. Reason cannot say *a priori* (unless the world is a thoroughly logical structure and we have the needed amount of thinking power) if there is anything like a long life, nor is there any absolute reason why we shall have that. But longevity is a dictate of reason in the case of a debtor, for instance. If a debtor requires to live upto his 80th in order to discharge his debt, it is immoral or irrational for him not to try heart and soul to do that. Again, although progeniture is not a

moral obligation, we have moral responsibilities towards our descendants as soon as they are born.

But even if reason does not *dictate* our ends, it must *censor* them. In other words, even if our ends are not 'commanded' by reaosn, they must be 'permitted' by it. It will say whether a particular end can be pursued, and whether the available means to that end can be adopted consistently with its principles. This permission comes in the form of our conformity with the moral principles or moral tests. What then are these principles?

It is here that ethics faces its toughest hurdle.* But, fortunately, we have a ready answer from the quarter of reason itself. Consistency or coherence is the core of rationality, and universality its unfailing mark. Hence, we can at once set down the fundamental moral law : Those maxims alone are commanded or permitted by morality which can be coherently and universally adopted. Following Kant we may also deduce therefrom a corollary, viz., in choosing a maxim we must regard all rational beings as ends-in-themselves.

Let us, for example, consider a few instances. (a) Truthfulness is moral, because it is obviously universalisable. (b) Our hunger for beauty is also universalisable. But if we all perfer ugliness to beauty, there is no objection from the moral side. We have already seen that beauty is a non-moral ideal; it is 'permitted' but not 'commanded' by morality. (c) Supposing there are only five men and five apples on earth. In that case, the maxim of taking more than one apple cannot be universalised and cannot treat all men as ends-in-themselves; One of these five men can take two, depriving someone else, only through a general consent.

Practical situations are highly complex, and it is not easy to have a clear logical insight as to whether a particular maxim is coherent or universalisable and therefore morally impeccable. Hence, the only alternative left is 'democracy'. Reason and morality are not democratic in the sense that something is logical or moral, *simply* because it satisfies the majority. But we must resort to democracy when a complete logical insight is impossible under the circumstances; obviously because, democracy guarantees the highest degree of coherence when perfect coherence is beyond our reach. The moral ideal may not be fully realized 'in fact' because of our intrinsic limitations; but it may be fully realized 'in our will'.

But true democracy must not mean the blind consensus of an unenlightened majority. True democracy is possible only when its members are sufficiently educated, enlightened, honest and earnest. Hence

* This question is in fact the main concern of ethics; but since this is not a book on ethics, we shall only limit ourselves to some passing observations..

follow certain conclusions as to the method of realizing the complete good of our life.

7. The method of realization

Like our end, the method of its realization is also quite complex. We may emphasize the following factors in it.

Social or political factors : The basic requirement for the realization of our values is an appropriate socio-political system. Anarchism is not only irrational, but has great disadvantages. Among political systems, democracy is most in fitting with the moral standard. It provides for one of the most fundamental conditions of morality, namely, freedom. Further, democracy alone can treat every rational being as an end-in-himself. The fact that on particular issues the verdict of the minority is rejected does not belie this, since this right to reject has been granted to the majority by the minority itself.

Educational factors : But democracy can properly function only in a condition of enlightened vigilance. The members of a democratic society must be duly educated, equipped with necessary knowledge, trained in the art of deliberation, alert and morally earnest.

But education must be extended beyond the bare political needs, to various fields of art, science, religion and philosophy, so that people can realize different types of values as far as practicable.

Economic factors : The ends that are usually described as economic values, are, in fact, no ultimate values;* but they are instrumental. 'Money', says the economist, 'is a matter of functions four.' But, as a matter of fact, money is wanted everywhere. A man deprived of economic security or bare material sustenance cannot possibly run after the higher values. Hence, we must devise the best possible economic system which will guarantee equal opportunities for all and equitable distribution of wealth.

Technological and Ethical factors : Material subsistence and amenities must be improved through technological means. Scientific knowledge must be applied in all possible ways to harness the natural forces and exploit natural resources. But along with that we must have due ethical training so as to make the best use of the fruits of technology. Lop-sided growth or exclusive emphasis on either technology or ethics must lead to frustration.

Sentimental factors : Sentiments play a vital role in our life and may be easily employed for tremendous consequences. Hence it is desirable to

* It is, therefore, that we have not included them in our list.

inculcate our better sentiments—particularly, the sentiment of 'universal love'. Our struggle for a noble and happy life can perhaps be easily intensified if we can add a sentimental fervour to our rational account of the same. Our duties towards others can be better served if we cultivate the sentiment of universal love—love for all, irrespective of all petty differences and distinctions.

8. Organic morality : One World

The view of morality that we have developed may be best described as *organic*. Reason is organic, because coherent. An organism thrives through coherence and co-operation among its parts. Similarly, reason demands coherence among our ideas. An argument is not valid unless its conclusion is coherent with its premise. Morality also demands coherence among rational wills. Hence moral action is analogous to organic behaviour. Just as an organism cannot develop or even exist unless its parts co-operate, so also a human society cannot progress unless its members co-operate, or even exist unless its members are at peace.

The problem of coherence, and hence of morality, hardly arises in relation to a Robinson Crusoe. But just when there are more than one individuals, they are faced with all the problems of co-existence, and their conduct comes to be in need of moral regulation. The same is true of two families, two communities, two nations, indeed of any two or more social groups. Hence, pure nationalism is not consistent with the moral standard. Nationalism must be internationally oriented or altogether give way to internationalism. Moral beings live in *one* world, and must live in one world (i.e., in a world-society) in order to be truly good and happy.

9. Not Competition, but Co-operation

It is, therefore, evident that co-operation and not competition is the true law of moral and happy life. Here also probably lies the best key to our haggard economic problems. Competition* is the rule of animal life, but even there we find co-operative exceptions. After all, co-operation is

* Our students are advised to *compete*. We talk of 'competitive' examinations and industrial 'competition'. These are all misleading concepts insofar as they are likely to (and in fact do) inculcate a spirit of *bad* competition. In fact, we usually take competition in a bad sense. But competition in its usual bad sense, being a principle of incoherence, is immoral, and it is not at all impossible to go without it. Unhealthy economic competition in all forms is the great Satan responsible for most of our evils. Of course, competition is useful insofar as it stimulates the best exercise of an individual's latent capabilities; but the same result may be obtained from such other motives as love, sympathy, benevolence, and the sense of responsibility, provided we are able to effect a change of outlook and create the appropriate cultural conditions.

the general law of the great Cosmos. Countless particles co-operate to constitute the universal structure, and exist only in virtue of integration, harmony and reciprocity. Human beings may not perform the miracle of throwing off all social divisions and other distinctions in a day or two. But different social groups, so long as they do not lose their differences, must co-operate as members of the same family rather than compete and quarrel with one another fang and claw.

Co-operation is in fact one of the most important steps biological evolution has taken to let humanity emerge out of bare animality. If co-operation has worked in the past and has been a basic factor in the growth of civilization and culture, it is needed to a far greater degree at the present moment. On the one hand, the conquest of space and time through improved methods of transportation has brought human groups so close to one another that they form almost a single body. On the other, we have developed such monstrous nuclear weapons that any thoughtless use of them will not only destroy our civilization but even efface the very existence of mankind. We are simply in an unforeseen predicament, which has drawn the serious attention of many great minds. It is high time for us to cripple the demon of bad competition (competition as usually understood) and imbibe the spirit of love and co-operation.

We must develop a wide universal outlook and a feeling of unity. As an idealist has aptly put it, "a sense of unity and cohesion must be given top-priority in the moral code of modern man and woman. We may call this politics, we may call this religion or a curious mixture of both or something else if we like, but we should remember that upon this depends in a very real sense man's future. As such, the moral value of an action in the complex modern environment must invariably be judged by its capacity to contribute to human unity and understanding. An action is moral so far as it does this, immoral so far as it desists from it and exerts separatist influence."[6]

10. The Happy Marriage between Matter and Spirit : between Science, Philosophy and Religion

Our human life, in its successful and truly human form, appears to be a happy marriage between matter and spirit as they are generally understood.[7] At a deeper ontological level, this distinction between matter and spirit, as we have seen, becomes doubtful. But it is quite real at a superficial level and may serve as a very useful guide for the average practical man. Let us, therefore, accept the age-old distinction between matter and spirit and also between material and spiritual values even in their naive forms (with due

reservations), and say that our real success and satisfaction consists in a judicious harmony of these values. An exclusive emphasis on either must frustrate us. Both traditional orthodoxy and modern materialistic secularism commits that Himalayan blunder. If these different outlooks may be contrasted as 'other-worldly' and 'this-worldly', we must say that our real honour and, under the present crisis, all hopes of our future, nay our very existence, depend upon a happy balance between these outloooks.

The synthesis of matter and spirit implies a synthesis of science, philosophy and religion. Science has not only made us familiar with the secrets of nature, but has also discovered numerous methods of exploiting her immense resources. Science has thus guaranteed our material prosperity. But material prosperity without a corresponding spiritual advancement must break down from its own weight. Philosophy will take science to the highest limit of fulfilment, both theoretically and practically. It will unify our scientific ideas and provide for the indispensable moral training for the best utilisation of our wealth and power gained through technology. In brief, it will complete and fructify our material achievements by supplying the necessary spiritual factors.

Religion is essentially a *way* of life rather than a doctrine. Hence, rightly understood, it comprehends both our material and spiritual aspects, and is thus concerned with both science and philosophy. Evidently, therefore, it occupies a place of supreme importance in our life. This follows also from our notion of 'humanity' and its relation to 'divinity'. Religion so taken is alone religion in its true colour. But it can play its proper role and deserve its true position only when it is freed from bigotry, prejudices and misguided vested interests.

11. Our Relation to the Super-human and Sub-human Worlds

The question of our relation to the super-human and the sub-human worlds is at once interesting and important. We cannot conceive of a super-human world which differs from us except in 'degree.' Such a super-human world is the world of divinity which, as we have seen, is but unlimited humanity. We look up to that world as our supreme ideal which we struggle to attain, although it may never be fully attained.

But what about our relation to the sub-human world? Our moral legislations cannot be final without taking account of that. It is obvious that the question of justice is meaningless with respect to whatever is unconscious and incapable of pain or pleasure. Such beings belong to the non-moral kingdom and our relation to them is also non-moral. We can do neither good nor harm to them. As for those sub-human species which are

conscious and capable of pain and pleasure, e.g., lower animals, the question is not easy to answer. We shall not enter into it (for want of space in the present work) but only make a few general observations.

(1) Morality as the law of coherence demands that we shall be in harmonious relations with the subhuman species. We cannot harm them without doing some good in return. Hence, for example, our killing of domestic animals is less immoral than that of wild animals (if the latter is immoral). Many wild species have become or are becoming extinct, while the domestic species are continuing.

(2) There seems to be a correspondence, more or less exact, between a living being's capacity for feeling pain and pleasure and its capacity for expressing the same. A plant may be said to be inferior to an animal, and an animal to a man, in respect of such capacities. Hence when we destroy a plant or slaughter an animal for consumption, it seems that we cause less pain to the former than to the latter.

(3) After all, we must be sympathetic and tolerant towards the living beings as far as possible. "It is not right," said Akbar, the great Mughal emperor, "that a man should make his stomach the grave of animals." The hunting of wild animals for mere pleasure is perhaps as good as barbarism.

12. Our Enemies

Man, since his emergence from the stage of animality, has been fighting hard against many powerful enemies. His advancement along the lines of civilization and culture has been a tough battle. Some of these ememies are purely natural, while others are the issues of his own failures. These enemies are but those factors which are classed as evils and opposed to our goods or values. In the present context they may be briefly considered as follows.

Natural enemies : We live in the lap of nature, but her attitude towards us is rather miserly. Kant aptly speaks of 'the niggardly provisions of a step-motherly nature.' She is at least relatively indifferent towards our weal and woe. On the one hand, she has extended to us her immense resources; on the other, she has thrown at us her merciless weapons of destruction. Earthquakes, cyclones and epidemics are only a few of such destructive weapons, which take away thousands of lives every year. Nature has also saddled man with certain bad propensities, such as greed and hatred, which are perennially leading him astray and staining his history with boundless suffering and shame.

Greed : Of these bad propensities, greed is probably the worst. Directly or indirectly, it is the root source of almost all other wrong tendencies and

is basically responsible for most of our miseries. It begets shameless and persistent clashes of interests, and divides men into warring groups.

No doubt that upto a certain level the niggardliness of nature is partly responsible for this. If the bounty of nature were unlimited, greed could hardly lead to any conflict. But even the limited provisions of nature, at least when backed by our own efforts, are enough to meet our *real* wants, though not our greed. Greed begets artificial needs; but artificial needs can never be fully satisfied, just as a man who pretends sleep cannot be roused. The difficult situation has been made more difficult by the addition of the childlike but always potentially dangerous greed for power, fame and glory to the greed for ordinary material objects. But greed is like the fabulous demon of unlimited hunger, who can be perfectly satisfied only by a death-pill. As it has been aptly put by a celebrated writer, the earth can provide enough room for man but little room for his greed.

Ignorance and prejudices : Throughout the long onward march of man's history, ignorance and uneducation have been two of the greatest obstacles. Even in this day of wonderful scientific advancement, the great majority of men and women are going without the three R's. In such a condition, prejudices and superstitions easily prevail over truth, and mislead people. The true philosophy of life becomes shadowed by a false one which often sets the blind masses after petty objectives or pseudo-values. They mistake the bad for the good, the ugly for the beautiful, the coloured glass for the precious jewel. Consequently, they are very easily led into brutal conflicts or bloody strifes, even when their real or even artificial interests are not in danger.

Divisionism : Greed, hatred, ignorance, uneducation and prejudices have all conspired to divide men into numberless groups and classes. There are divisions and divisions—religious, political, economic, racial, communal, linguistic, cultural, national and even international. There are divisions and sub-divisions within a religious community, and factions within a political party. In a word, the wild spirit of divisionism has played havoc with the human philosophy of unity and brotherliness.[9] As a result, man has been thrown into a most unfortunate vicious circle. Greed, hatred and prejudices have begotten innumerable divisions, and these divisions, in turn, are begetting further greed, hatred and prejudices. No doubt conditions are improving, but improving only too slowly and intermittently, and there is as it were no end to the process.

13. Not Evolution, but Revolution

But are we absolutely powerless against our ememies? Perhaps not.

Man is ever fighting these enemies, though with only slowly increasing success. Of the natural enemies, the physical ones such as cyclones and epidemics are being subdued by improved technical methods; and the psychological ones, such as greed and hatred, can be successfully fought by educational measures. In fact, greed and hatred are not wholly natural; they are largely artificial. It is the prevailing family atmosphere and social conditions that are mostly responsible for our being greedy of certain things and hateful towards others. Greed, hatred, prejudice and sordid class-consciousness thrive mainly in the social soil and pass from generation to generation much like inheritance. It is, therefore, that a successful fight against them is quite possible through artificial means.

Throughout man's history, his real progress has been determined by the degree to which he has successfully resisted these enemies. But his success seems to fall far short of the time and opportunity he has been granted. We may enumerate three factors as the most fundamental reasons for this, viz., our general lethargy, self-centredness (i.e., the selfish tendency to abstain from interfering with the affairs of 'others' lest our 'own' house is disturbed) and conservatism. The result has been that man's history of progress has been one of evolution or very gradual progress, with only very few casual breaks. It took a few centuries to convince the medieval orthodoxy of the broad fact that the earth moves round the sun; and, of late, it took our people long nine years to have a constitution (1957), good or bad.

But such lethargy, self-centredness and dilly-dally are not at all consistent with our proud pretension that we are men, i.e., free, rational and intelligent beings, the supreme lords of the animal kingdom. As I have said elsewhere: "Evolution is the method of nature; but man's method is revolution, and the characteristic effort of man is to make human what is barely natural. Man's life is too brief and otherwise too valuable to wait for decades or centuries for a change which can be effected within a year or so."[10]

As a poet has aptly observed, nature takes a hundred years to bloom a flower; but can we or must we wait so long? Man is not only capable of free volition; that he can effect abrupt changes appears to be one of the basic traits of his emergence from lower natural conditions. Of course, revolution must not imply undue obstinacy or thoughtless hurry. Its real meaning is a healthy and effective synthesis of cool deliberation and forceful haste. It must not be merely destructive, but also constructive; it must not merely involve sheer hatred towards the worse, but also real love for the better.

14. Philosophy's Great Role : Philosopher Kings

Herein lies the great role of philosophy in our struggle for existence.

Philosophy need not suggest the details of the effective method of such progressive revolutions. But it will develop the appropriate code of life and throw light upon the broad avenues along which the supreme ideals can be realized. This reminds us of Plato's vision of philosopher-kings. The ideal human existence or the real success of man's struggle demands that the philosophers will be rulers or the rulers will be philosophers. That is to say, the rulers of a society—nay, the rulers of mankind at large or the ideal world-society—will be guided and controlled by the true philosophy of life. Philosophy will thus have its full blossom and will be what it should be. It will come out of its puritanical academic halo (casually and in part) and find its fulfilment in satisfying the practical needs of man's existence as man. Philosophy must not be merely a bookish or symposial affair; it must be applied and practised.

And that is perhaps the supreme need of the hour—the hour of unforeseen global tensions and crisis of ideals. Science has worked wonders. She has unveiled to us a hundred thousand ways of enhancing our material well-being; but, along with that, she has also invented destructive weapons of fabulous might. Hence we badly need the forceful guidance of a healthy philosophy of life that will enable us not only to make the best use of the gifts of science, but also to avoid the all-devouring hell-fire which is almost inevitable in the event of another world war.

It goes without saying that our material well-being is not possible without a corresponding spiritual well-being. The two are simply inseparable. And the long and short of this spirtitual well-being is an effective consciousness of the great moral law of coherence and a consequent feeling of the unity of all men. Dr. G. C. Dev aptly compares our present predicament to the lot of the unfortunate pundit who was overtaken by a sudden storm but did not know how to swim. As he rightly believes, as countless others perhaps do, man can swim over the surging ocean of death "only if he cares to learn side by side with science the philosophy of unity and make it his great sentinel in his collective deals."[11]

APPENDICES

APPENDIX–A

LANGUAGE AND MEANING

We have already noted philosophers' deep concern with language (Chap. II, Sec. 11), and will now deal with some issues which fall under what is generally known as the Philosophy of Language. Language is a familiar social phenomenon—a tool, naturally developed, which is so easily handled even by common people. But, as a matter of fact, language is not as simple as that. Students of grammar, in particular, are well aware of this. Philosophical investigations, however, reveal some further subtleties in the nature and functioning of language. Philosophical problems of language are many and various, but they can be brought under *four* main heads, as follows.

1. The Nature of Language : One of the interesting facts about language is that from the earliest times it has been viewed more or less superstitiously. "The whole human race," as Ogden and Richards once put it, "has been so impressed by the properties of words as instruments for the control of objects, that in every age it has attributed to them occult powers."[1] It is, for instance, believed that the names of gods or very distinguished saints are sacred, so that one should not utter them with an unclean body, or that an enemy can work evil magic on a person if he knows his name. It is common among believers to attribute a very special kind of sacredness to the language in which their respective scriptures have been written. The truth, however, is that language, like eating, drinking and the instinct of play, is something wholly natural, that there is nothing mysterious or supernatural about it. Only gradually did it grow out of a humble beginning in the form of noises made by primitive people to express their desires and feelings, or to respond to the same or similar noises made by others. A mature language is nothing but a system of the same kind of noises, with the difference that the sounds in it are much more numerous, well-formed, and regulated by more or less complex rules

[1] C.K. Ogden and I.A. Richards, *The Meaning of Meaning* (Tenth ed., 1952), p. 24.

of semantics and syntax.

Such a language (i.e., language made of words) is a 'verbal language which is what we normally understand by a language. It is to be distinguished from a 'gesture-language' which consists of demonstrative or imitative signs. The language used by a deaf and dumb person, for instance, is a gesture-language. A verbal language may be either *spoken* or *written;* usually or often it is both. A spoken language is a system of sounds produced by its speakers, whereas a written language is a system of *marks* inscribed on something. While the spoken form of a language is fundamental, its written form gives it stability and a greater degree of definiteness.

Any language is made of *signs,* but signs can be eiher 'natural' or 'artificial'. Clouds of a certain type are a natural sign of impending rain; a blush is a natural sign of a shame or embarrassment. Words of a verbal language are artificial signs; but they are also called 'conventional signs' because the assignment of meanings to them is a matter of convention, i.e., a matter of accepted usage, social practice, or linguistic habit. That, for example, animals of a particular kind are called 'cows' and those of another kind 'dogs' is purely a matter of convention; cows will not cease to be herbivorous if from now on they are called dogs or tigers. Conventional signs are also called 'symbols'. Thus the language in which we normally communicate as members of a society is, in fact, only a system of conventional signs—a complex system of symbols. It is usual to call such a language a 'natural language' or 'ordinary language'. A language, however, is conventional not merely with regard to its semantics and many grammatical features; its syntax too is very largely a matter of convention. To take some instances: the word 'man', in one of its senses, means both men and women, while in another it means only male human beings. In English there is a distinction between 'he' and 'she'; but there is no parallel distinction in Bengali. Not all but only some languages have both masculine and feminine forms of their adjectives and verbs. While in English 'We *eat* rice' in Bengali 'We rice *eat*', and so on.

2. Uses or Functions of Language

Language is used to do many different kinds of things, such as reporting, informing, describing, giving orders, asking questions, expressing our feelings, and so on. Wittgenstein, in his *Philosophical Investigations* (Remark No. 23), speaks of 'countless different kinds of use of what we call "symbols", "words", "sentences".' J. L. Austin distinguishes between three kinds of linguistic acts: locutionary,

illocutionary, and perlocutionary. A locutionary act is simply an act of saying something; an *illocutionary* act is the "performance of an act *in* saying something", whereas a *perlocutionary* act is to do something *by* saying something. Someone, for instance, tells me "Please shut the door." The mere utterance of this sentence, as such, is a locutionary act. In uttering this sentence someone is requesting me to shut the door. Requesting, suggesting, announcing, reporting, etc. are illocutionary acts. In the present case the speaker's request may or not have the *effect* of persuading me to shut the door. A perlocutionary act consists in the effect that an illocutionary act has on the hearer.

However, even though we perform numerous different kinds of acts by using language, these diverse acts are usually brought under *three* general categories, and accordingly we have three different uses or functions of language : Informative or Communicative, Expressive, and Directive. First, language is used *informatively* when we communicate our ideas or thoughts to others, or whenever we reason or put forward arguments, report an event, or describe a phenomenon.

In all these we make statements, or assert or deny propositions. The informative use is most important and is indeed too common to need illustrations. It is also called 'descriptive use', or else 'scientific use' because the only function of language in science is informative or descriptive. Science solely aims at stating facts about the world and is morally or emotively neutral.

The *expressive* use of language is its use to express our feelings, attitudes or emotions, and to *evoke* similar feelings etc. in others. And in this the speaker's aim, often if not always, is to *influence* the hearer's activity or conduct. Thus the expressive use of language is, in fact, evocative and persuasive as well. Since, however, this use involves a role of feelings or emotions (as opposed to information), it is also broadly termed as 'the emotive use of language.'

We say 'How wonderful!' to express our delight, or 'That's too bad' to express our sorrow, or 'How strange!' to express astonishment. We use emotive language to express enthusiasm, to give encouragement, to express politeness, or to vent our feeling of awe at the vastness or mysteriousness of the universe. However, perhaps the best examples of expressive language are to be found in literature, especially in poetry. The main function of literature is not to instruct, but to delight, enliven or rejuvenate. A piece of poetry which appears to be descriptive or informative may, in reality, be only an outpouring of the poet's feelings, an expression of his emotional reaction to a situation. This, for example, is

true of Wordsworth's beautiful lines when, referring to the solitary highland girl reaping and singing in the field, he writes :

A voice so thrilling ne'er was heard
In spring-time from the cuckoo-bird
Breaking the silence of the seas
Among the farthest Hebrides.

The *directive* use of language consists in employing it to cause or to prevent overt action. Commands and requests are instances of directive use. 'Shut the door' expresses a command, while 'Please shut the door' expresses a request; but in both the purpose is to produce some action, to get some result. Asking a question is usually (though not always) to make a request and is therefore a case of the directive use of language. The question 'Who invented the telephone?' is clearly a request for an answer; but 'Is he not a professional cheat?' is very likely an indirect form of asserting that he is a professional cheat.

It is to be noted, however, that although these three uses of language are clear and distinct, they are not necessarily mutually exclusive. One and the same expression may have more than one use. As I. M. Copi puts it: "The three-fold division proposed is illuminating and valuable, but it cannot be applied mechanically, because almost any ordinary communication will probably exemplify, to a greater or less extent, all the three uses of language. Thus a poem, which is primarily expressive discourse, may have a moral and be in effect a command to the reader (or hearer) to lead a certain kind of life, and may also convey a certain amount of information." (*Introduction to Logic*, 2 : II)

3. Theories of Meaning

If common people are unwilling to talk nonsense, philosophers are even more so. Showing that a particular theory involves nonsense, that its formulation makes use of some meaningless expression (word, phrase or sentence), is one of the surest ways to refute it. Meaning is, therefore, a problem of supreme importance for a philosopher; in a sense, it may be said to be the very starting-point of philosopical inquiry.

The word 'mean' or 'meaning' has more than one use, linguistic or nonlinguistic. We are concerned with linguistic meaning, i.e., the meaning of such linguistic units as words or sentences. There are, however, various kinds of linguistic meaning : cognitive (descriptive, factual), emotive or expressive, literal, figurative or metaphorical. From some other points of view, meaning may be either basic or derived, esoteric or exoteric,

'standard meaning' as opposed to deviations. All of these kinds, more or less, deserve the attention of the theorist of meaning. Since, however, information or description is the most important function of language, cognitive meaning is fundamental and is naturally the primary concern of the theories of meaning.

Again, since meaning can be of a word (or phrase) or of a sentence, we have theories of word-meaning as well as theories of sentence-meaning. The basic question is: What is meaning? Or, what is it for an expression to have a meaning? There are several answers to this question, as follows.

(a) The referential theory of meaning : The simplest and the most natural of the theories of meaning is 'the referential theory'. According to it, for a word to have a meaning is for it to refer to (i.e., to name, designate or stand for) something, which may be either a thing or a quality or a relation, and so on. The object referred to is called a 'referent', and the 'meaning' of the word is either its referent as such or its *relation* to the referent.

Bertrand Russell espouses the referential theory when he remarks : "Words all have meaning in the simple sense that they are symbols that stand for something other than themselves." *(Principles of Mathematics,* p. 47) No doubt this theory works up to a point but has some obvious limitations. For instance, it does not apply to words which have a meaning but no referent ('is', 'and', 'if' etc.) or to such words as 'I' or 'You' which have the same meaning but different referents on different occasions. Again, the names of imaginary objects–such as 'unicorn', 'centaur,' 'mermaid' or 'pakshiraj' (winged horse)–surely have a meaning; but they are rendered meaningless by the referential theory.

(b) *The ideational theory of meaning :* According to the ideational theory, the meaning of a word is the *thought* or *idea* it is used to express, or to evoke in someone's mind. This theory has the great merit of being applicable to words which have a meaning but no referent. The word 'unicorn' or 'because', for instance, has no referent; but each of them stands for an idea and is therefore endowed with a meaning. The theory, however, is not free from difficulties. First, what should we understand by a thought or an idea? We may understand by it something too abstract to be of any use in determining *what* meaning a particular word has. If, on the contrary, we understand by it an *image* (mental picture) difficulties still remain. Images do not necessarily accompany each of our uses of words, or the use of the same word is not necessarily and invariably accompanied by the same image in the speaker or the hearer. "The ideational theory,"

says W.P. Alston, "will not work even for words that have an obvious connection with mental images, for example, 'dog', 'stove' and 'book'. A little introspection should be sufficient to convince the reader that insofar as his use of the word 'dog' is accompanied by mental imagery, it is by no means the case that the mental image is the same on each occasion the word is used in the same sense. At one time it may be the image of a collie on another the image of a beagle, on one occasion the image of a dog sitting, on another the image of a dog standing, and so on." (*Philosophy of Language*, 1946, p. 25)

A word is as good as meaningless if its meaning changes from moment to moment or from person to person, and is of no use in communication unless it is taken in the same sense by the speaker and the hearer. With regard to any particular use of a word, the ideational theory fails to guarantee that this condition of meaningfulness and usefulness has been satisfied.

(c) Meaning as Use : In another theory, called 'the use theory of meaning', meaning is identified with use. That is to say, the meaning of an expression is, on this view, defined as a function of its use. Use, however, is rule-governed, and thus to know what an expression means is but to know the *rule* for its use. We know, for instance, the rule for the use of 'camel' when we apply it to something which *is* a camel (i.e., an animal with certain specific characteristics) and decline to apply it, say, to a horse or a hippopotamus. We, therefore, know what 'camel' means, and that is all to it.

Wittgenstein once remarked, "Don't ask for the meaning, ask for the use", and held that meaning can be defined in terms of "its use in the language." (*Phil. Invest.*, Sec. 43) In the same vein Gilbert Ryle, one of his followers, contends : "Understanding a word or phrase is knowing how to use it, i.e., make it perform its role in a wide range of sentences."

This theory has the merit of denying that meanings are a kind of mysterious (possibly abstract) entities somehow attached to words or sentences, or they are some kind of inner mental processes. It correctly implies that a word is only a conventional sign and that its meaning is something which it *acquires* by virtue of its employment and role in a language. There are, however, some obvious objections to the slogan, 'Meaning is use'. First, there are uses of words which are irrelevant to the question of meaning, e.g., uses which aim simply at terrifying or persuading someone. Secondly, knowledge of use and knowledge of meaning do not always go together. Many or most people, for instance, know how to use 'Amen' without knowing what it means, and proper

names or purely mnemonic verses have a use without having a meaning.

It appears, then, that saying just that meaning is use is not quite enough: we are required to know, further, *what* use or what sort of use meaning really is. But an answer to this question will perhaps inescapably lead us to something like the referential or the ideational theory, or to some other theory of this sort.

(d) *The behaviorist theory of meaning* : The behaviorist (or behavioral) theory tries to explain meaning in terms of stimulus and response without calling upon such logical or mental concepts as reference, idea, etc. The referential theory identifies the meaning of an expression with its referent or its referential connection, the ideational theory with the idea it represents, and the use theory with the job it is used to do. Unlike any of these, the behaviorist theory treats meaning as a function of the situation in which an expression (a word or a sentence) is uttered and the response which its utterance evokes or tends to evoke.

Leonard Bloomfield, one of the exponents of this theory, defined the meaning of an expression as "the situation in which the speaker utters it and the responses which it calls forth in the hearer." (*Language*, p.139) One obvious objection to this formulation is that even the utterance of a meaningful expression may not always evoke a response. Charles Morris tries to remedy this defect by substituting 'disposition to respond' for actual response. Thus, according to this view, to know the meaning of an expression is to know the kind of situations which stimulate its utterance and the type of behavior which its utterance produces or is disposed to produce.

This theory, however, has been criticized as ultimately indefensible. First, it is to be noticed that the same expression with one and the same meaning is usually uttered in a large variety of situations. Hence, if this theory is to be correct, there must be features common and peculiar to the situations in which the expression is uttered and also to the responses evoked by its utterance. But whether there really are such features in any or every case in indeed a big question. Secondly, even if there were such common and peculiar features, it would not be proper to identify them with the *meaning* of the expression; they would only be either the *cause* of the utterance of the expression or the *consequence* of understanding what it means.

(e) *The picture theory of meaning* : Ludwig Wittgenstein, in his *Tractatus Logico-Philosophicus* (1921), propounded a theory about propositions which came to be known as 'the picture theory of the proposition'. It explains what propositions are and how they mean, or how

they are related to the world. Since this theory is concerned with meaning it is also called 'the picture theory of meaning.' Wittgenstein distinguishes between proposition and 'propositional sign' which is a 'sentence', i.e., an indicative sentence. Unlike a sentence a proposition is a *logical* entity, a thought; its elements are 'names', while the elements of a sentence are 'words'. Corresponding to propositions, there are actual or possible 'situations' (states of affairs) in the world, and their elements are called by him 'objects.'

"A name," says Wittgenstein, "means an object. The object is its meaning." This is the referential theory of meaning, but he holds a different view with regard to propositions. Although objects are the meanings of names, names have no meaning independently. "Only propositions," Wittgenstein contends, "have sense; only in the nexus of a proposition does a name have meaning." (*T*, 3.3) What, however, is it for a proposition to have a sense? "A proposition is a picture of reality : for if I understand a proposition, I know the situation that it represents." (*T*, 4.021) Again : "A proposition states something only in so far as it is a picture" – i.e., a "logical picture." (*T*, 4.03) A proposition, however, is the picture of a situation by virtue of having the same number of elements and the same 'form' (manner of combination of elements) as the situation itself. A proposition *means* the situation, and *says* something about it; but it only *shows* or displays its form.

It is to be noted that Wittgenstein takes the word 'picture' in a literal and not in a figurative sense: a proposition, on his view, *is* a picture and not merely *like* a picture. Moreover, he takes his picture theory to be applicable to all propositions, both elementary and non-elementary.

This theory of meaning seems to have been universally rejected. "The configuration of objects in a situation," says Wittgenstein, "corresponds to the configuration of simple signs in the propositional sign." Ogden and Richards call it an "unplausible conclusion"—something "unnecessary and highly improbable." George Pitcher argues that a proposition, in order to be able to communicate, need not necessarily be a picture, since in a flag-language, for instance, "each flag says something, but none is evidently a picture of anything." He, moreover, cannot see how the truth-functional view of propositions could be established if all propositions were pictures. (*Wittgenstein*, Chap. 4) The more remarkable fact, however, is that Wittgenstein himself, in later years, abandoned the picture theory and replaced it by what came to be known as the use theory of meaning.

(f) The verificationist theory of meaning : This theory of meaning has been advocated by the members of the Vienna Circle, founded in 1924,

and their followers. They are known as 'logical positivists' and include Moritz Schlick, Rudolf Carnap, Otto Neurath, Herbert Feigl, Carl Hempel and A.J. Ayer, among others. They lay emphasis on experience and science, so that this position is otherwise called 'logical empiricism'. They keep in view the distinction between analytic and synthetic truths, distinguish between emotive and factual meaning, and enunciate an empiricist criterion of factual meaningfulness. This theory is also called the 'verifiability' or the 'testability' theory of meaning.

"The meaning of a proposition," said Moritz Schlick, "is the method of its verification." This criterion of meaning was reformulated and given a wider range of applicability by Ayer in his work, *Language, Truth and Logic* (See : *supra*, Chap. V:3). A sentence, said Ayer, is factually significant if and only if it admits of empirical verification—if, in other words, we know what observations would lead us to accept it as true or reject it as false. Verifiability, thus, does not necessarily mean 'capable of being proved true'; it also means 'falsifiability'.

The result of applying this criterion is particularly disastrous for metaphysics. It is argued that such metaphysical statements as 'Mind is a spiritual substance', 'Reality is an absolute whole,' or 'God is an unmoved mover' are incapable of any empirical test, are neither verifiable nor falsifiable, and are therefore meaningless. This of course does not bear upon analytic propositions which are not empirical hypotheses and do not claim to state *facts*. They are non-empirical or *a priori* and, when true, they are only tautologies. Ayer points out that tautologies and empirical hypotheses form the entire class of significant propositions, and then contends that since metaphysical propositions are neither tautologies nor empirical hypotheses "we are justified in concluding that all metaphysical assertions are nonsensical." *(Ibid.* p.41)

This theory of meaning had for a time a great deal of influence; but it had rather a short life. Under the impact of external criticism as well as self-examination, the demand for verifiability was found to be too strong and was reduced, by stages, to a demand for simple 'confirmability' and then to mere "translatability into an empirical language." One of the crucial objections to the verifiability criterion is that meaning logically precedes verification : if we are to know how to verify a statement we must already know what it means. Another objection is that, even if per chance it is aplicable to *empirical* statements, it does not provide a *general* theory of meaning, i.e., a theory good for all kinds of statements. Alston contends that 'meaningful' is a vague term, "not a term with clearly defined boundaries," and that a sentence can be defective in some way or other

without necessarily being meaningless. And Waismann, one of the members of the Vienna Circle, eventually had his own reasons to remark: "To say that metaphysics is nonsense is nonsense." ("How I See Philosophy")

4. Language and Reality

Mainly, though not entirely, we use language to talk about reality—to state facts about the real world. Usually we succeed, or at least wish to succeed, but not always. Language is neither a mirror nor a picture of reality, but only a regulated system of symbols which requires to be handled with honesty and care if we are to express ourselves properly and not to mislead people into false beliefs. The language that we inherit and use as a matter of course is an invaluable aid to our thought and action; but philosophers caution us that in some ways it also leads us astray and produces what may be called 'linguistic illusions'. They argue, for instance, that the concept of substance and our belief in universals or in abstract entities of any kind are such illusions. And Wittgenstein, as we have already seen (Ch. II: 11), said of philosophy that it is "a battle against the bewitchment of our intelligence by means of language."

Philosophy of language is a subject which has a broad area and many questions. We have only barely touched upon some of them. It is to be noted that the problem of the relation of language to thought and reality is not only a matter of theoretic curiosity but is of a good deal of practical interest. On the theoretic side, the philosopher of language asks us to reflect on such expressions as 'perfect being,' 'average man', 'infinite number', 'monadic relation', etc. or on such sentences as 'The sky is *studded* with stars', 'Time has *robbed* me of my youth' or 'Dick and Harry are really *one* person,' and to try to understand what they really mean. On the practical side, he urges us to beware of such things as verbal disputes, persuasive definitions, pseudo-statements and multiple functions of expressions, and to pay attention to the real intentions and purposes of the speaker.

Let us, however, conclude with an instance of the speaker's hidden intention. Suppose a political speaker, in a public meeting, says in an emotional tone of voice: "If it is certain that the sun will rise tomorrow, it is infinitely more certain that we will win the next election." What is he doing? Is he stating a fact or making a prediction? Is he prepared to vouch for the truth of what he is saying? None of these, presumably. Most possibly he is only uttering something which is expected to encourage his party-men and persuade the audience to vote for his party. No wonder that

common people, who are usually not on guard, are often easily misled by such artful oratory.

Further Readings :

Alston, W.P., *Philosophy of Language* (Prentice-Hall, 1964).

Searle, J.R., *Speech Acts* (Cambridge University Press, 1969).

Black, Max, *The Labyrinth of Language* (A Mentor Book, 1969).

Cooper, David E., *Philosophy and The Nature of Language* (Longman, 1973).

Linski, Leonard, ed., *Semantics and the Philosophy of Language* (University of Illinois Press, 1952).

APPENDIX–B

NOTES TO THE TEXT

Chapter-1

1. I have come across some stories about philosophers, depicting them as curious beings utterly careless about practical concerns and unable to understand even very simple things. Such stories may be a source of amusement to some; but the best that can be said of them is that they are generally, if not always, about pseudo-philosophers. Since a philosopher has to handle matters of basic interest and to do a lot of serious thinking, a real philosopher must be, above all, a very careful and unruffled type of person.

2. The students who take up philosophy in virtue of their interest in the subject or those who are otherwise interested in philosophy are well aware of the strength with which a curiosity about the mysteries of the world and life or a feeling of ignorance about them holds the mind in its pinching grip. In such a condition they cannot help resorting to philosophical reflection. Such is the curiosity of a philospher, and in a similar state of discomfort, he lends himself to a tireless search for satisfactory solutions of his problems. Philosophy, thus, is not sophistry, a useless and aimless pursuit. The fact is that the kind of knowledge which philosophy seeks is something we cannot do without; yet what of it we have from ordinary sources, such as tradition or common sense, is either partial or unverified and is therefore unsatisfactory. Philosophy thus becomes a must.

As Cunnigham puts it : Philosophy grows directly out of life and its needs. Every one who lives, if he lives at all reflectively, is in some degree a philosopher.

3. *History of Philosophy,* p.1. Also Brightman aptly observes : 'The philosopher's unpardonable sin is indifference toward any area of experience....' *(Philosophy of Religion,* p. 251) Russell says in one place that philosophy should be piecemeal and provisional, but in another place he observes that philosophy is "less concerned with details and more concerned with the harmony of the whole body of special sciences." *(An Outline of Philosophy,* pp.2-3). Philosophy can be piecemeal in the sense

that different philosophers may be interested in different problems, but not in the sense that it will, for example, solve some problems materialistically and some other problems idealistically. In comprehensiveness lies most of our justification for having philosophy over and above 'special' sciences, and denial of it can grow only in the soil of frustration. Comprehensiveness is at any rate the ideal, to whatever degree philosophy may have been able to attain it so far.

4. 'The emotion of wonder', says Plato, 'is very proper to a philospher; for there is no other starting-point for philosophy'. Again, Aristotle said, 'It is owing to their wonder that men both begin and at first began to philosphize;... therefore since they philosophized in order to escape from ignorance, evidently they were pursuing science in order to know, and not for any utilitarian end'. *(Metaphysics*, A, 982^b).

It must be noted, of course, that these accounts are one-sided, to which we find an opposition even in Socrates. He had little interest in theoretic knowledge for its own sake, and in this he closely resembled the Sophistis.

5. Read Chapter I of Patrick's *Introduction to Philosophy.*

6. The Sophists of early Greece professed their sceptical philosophy in a condition of doubt about the older systems, germinated by the wide differences and disharmonies among them. Socrates came forward with a refutation of Spohism. Rene Descartes, the father of modern philosophy, sought to establish independently a new philosphical system in his utter dissatisfaction with the scholastic trends of the Middle Ages. But doubt about Descartes' own system has, again, been a source of many other new systems, and so on. At the moment we are again in a serious condition of doubt as to many older ideas and traditional values, which demands a most patient and unbiased consideration of things. By the side of its brilliant gallary of scientists, the modern age badly needs an equally brilliant gallery of philosophers.

7. John Caird, *An Introduction to the Philosophy of Religion* (Glasgow, 1880, 1920), p.3.

8. The scope of philosophy : Our account of the nature and scope of philosophy may be disputed. The questions about the nature and goal of philosophy—questions as to how it relates to science and art, how far it can be independent and critical, what practical interests it is expected to serve, etc.— have not been answered exactly in the same way at all times. The notion of the nature and scope of philosophy has been undergoing most radical revisions in the current times. Philosophy is being more and more restricted to purely critical and analytic pursuits. Such branches of philosophy as cosmology and metaphysics, which figure most prominently

in traditional philosophy, are no longer held in esteem. We rather find the greater emphasis on methodological investigations and also the rise of some new branches closely associated with them. These new branches (the Philosophy of Language, Meta-epistemology, Meta-ethics, etc.) are especially interested in the logical analysis of ordinary language or in the elucidation of basic concepts used in popular, scientific or philosophical talk about things.

Apart from this, no two text-books are perhaps alike in their treatment of the scope of philosophy. Even such terms as 'cosmology', 'ontology', etc., are not understood in the same way. Our account of scope has been chosen in view of its simple and comprehensive nature. No doubt that all of the nine branches we have enumerated would not be recognized by every philospher. For instance, Kant, being followed by the logical positivists, threw off metaphysics. These shifts in perspective and revisions of the nature and scope of philosophy are all a matter of controversy into which such an introductory work cannot possibly enter.

It is, however, wrong to divide philosophy into philosophy of phenomenon (phenomenology) and philosophy of noumenon, since such a division is itself a philosophical conclusion and cannot therefore be made an assumption to start with. The introduction of *'Anthropology'* as a distinct branch of philosophy may invite questions. Most of the problems brought under it are often treated under the head of *soul*. But we have preferred Anthropology to 'philosophy of the soul' for three reasons. Firstly, although 'anthropology' usually designates a branch of biology, the word has historically as well as etymologically a wider sense in which it simply means a study of man. One of the periods into which the History of Greek Philosophy is divided is 'the anthropological period' which includes the Sophists and their great rival, Socrates. Secondly, while the soul is a hypothesis, *man* is a concrete indubitable fact. The business of philosophy is to study facts and not mere hypotheses. Thirdly, the general problems of man's essence, of his place in nature, his freedom of the will, his consciousness of value, the meaning of his life, etc. can only perforce be brought under the soul.

Mention should be made of some other branches of philosophy, or new names for old branches, such as : Metaphilosophy (dealing with the nature, scope, etc. of philosophy), Philosophy of Science, Political Philosophy, Social Philosophy, Philosophical Logic, Philosophical Psychology, Applied Philosophy, etc.

9. 'Since, then, philosophy differs from the sciences no wise in its spirit but only in its boundaries, in dealing with certain comprehenive

features of experience which lie outside the purview of the special sciences, its method will be like theirs empirical. It will proceed like them by reflective description and analysis of its special subject-matter. It will like them use hypotheses by which to bring its data into verifiable connection. Its certainty like theirs will extend no further than its efficiency in providing a reasoned exhibition of such system as can be discovered in these data.'

—S. Alexander : *Space, Time and Deity :* Vol.I, p.4.

10. See the Introduction to his *History of Western Philosophy.*

11. Almost all great philosophical systems contain a chapter on social, ethical and religious problems attached to those on theoretic metaphysical problems. This is in harmony with the description of philosophy as love of 'wisdom', which means either clear knowledge or a power to make a right use of knowledge.

As an eminent thinker puts it: "The polemics and academic debates of philosophy are really a means to an end and not an end in itself. Philosophy is essentially an experiment with life in its broadest dimensions and its final aim is, as it were, to give a push ahead to man's progress." (G.C. Dev, *Idealism: a New Defence and a New Application,* pp.16-17). He also says :

'Through my life-long endeavours to come into cordial relations with philosophy, I have realised the truth that any fruitful philosophy is philosophy of life. The term, philosophy, therefore, is only a synonym of the term, philosophy of life.' (Translated from *Amar Jivan Darshana,* pp. 6-7).

12. Robinson—*Anthology of Recent Philosophy,* p.71.

13. *Ibid.,* p.79.

Chapter II

1. There is a popular quip that science knows more and more about less and less. This, inverted, applies as well to philosophy. Thus, in brief, while science is a matter of specialisation, philosophy is one of generalisation. Science is analytic, looking as much for details as possible; philosophy is synthetic and synoptic. Philosophy investigates the general features or universal conditions of things. 'Philosophy', as Uberweg puts it, 'is the science of the universe, not in its particular details, but in respect of the principles which condition all particulars'.

In respect of his specialisation, the fate of the scientist is somewhat analogous to that of the seven blind men of an Indian myth, who, in their eagerness to know what the eleplant was like, had individual perceptions

of the different limbs of an elephant and separately identified the elephant with each limb; and yet were satisfied that they had known the elephant as such. (The notable difference, however, is that no scientist is blind and so foolish and presumptuous as to say that he has known the reality at large.) But the philosopher tries to know the elephant as a whole. "Philosophy", as Herbert Spencer puts it, "is completely unified knowledge—the generalisations of philosophy comprehending and consolidating the widest generalisations of science."

The house of the world is being measured and sketched piecemeal by sciences. "This" says the philosopher, "is all useful and necessary work; but I would like to get a picture of the way the house is going to look when it is done—or at least a glimpse of it. I am truly grateful to the scientists for all their laborious work, but I am—at times anyway—a little weary of studying these details—and long for some picture of the whole." (Patrick, *Introduction to Philosophy*, p.23).

Of course this conception of philosophy has been questioned by positivists who render it virtually into a grammar of science.

2. This is the function of Analytic philosophy. By examining and defining the key-concepts of science, such as cause, effect, time, matter, motion, law etc., philosophy administers the necessary remedy for the vagueness and confusion which may overtake its findings, and their consequent dubiety. Sciences are, not doubt, conscious of this need and may themselves undertake the examination. But generally, they do not pass beyond the extent barely necessary for their purpose. There is thus the need of a general science for this work, and this is philosophy. Science is indeed increasingly thinking it better to leave this work to the philosopher who, in view of his long experience in dealing with concepts, is taken to be a better expert in this art of critical analysis. Philosophy is thus a sort of clearing-house to sciences. This is why it is looked upon as even more critical than science. And it is partly because of this and also because of the comprehensive and ultimate nature of its scope that philosophy is regarded as the highest limit of intellectual pursuit. (cf. H. Mead—*Types and Problems of Philosophy*, p. 39).

3. The reader may note the curious change of attitude. While Samuel Alexander said that philosophy and science differ not in their method but in their subject-matter, A.J.Ayer, one of the chief exponents of logical positivism and current analyticism, holds just the opposite theory. In the very opening lines of his *The Problem of Knowledge* he observes : "It is by its methods rather than by its subject-matter that philosophy is to be distinguished from other arts and sciences". According to him, the method

of philosophy is analysis and the principal function of philosophers is : "already knowing the use of certain expressions, they are seeking to give an analysis of their meaning".

4. Rigorous critics look upon this as the fundamental difference between philosophy and religion. According to them, this not only makes the two different, but diametrically opposed. Philosophy is opposed to blind faith, and religion to free thinking. But this seems to be a rough assessment of their relations. A consideration of depths and details will show that the critical temper of philosophy and the dogmatic attitude of religion make them 'different' but not necessarily 'opposed.'

5. Bacon said : 'It is an assumed truth and conclusion of experience that a little or superficial knowledge of philosophy may incline the mind of man to atheism ; but a further proceeding therein doth bring the mind back again to religion".

"Indeed, philosophy should help us to put our fundamental religious beliefs on a solid intellectual foundation and so relieve us of much perplexity and doubt. Sometimes our religious beliefs are held timidly and with trembling doubt. We have a sub-conscious dread lest 'profane' science should come in and dissipate our beliefs. Philosophy takes us up into the mountain-top and allows us to look over into this valley of uncertainties. In this, as in many cases, knowledge banishes fear. Having seen the worst and found it not so very bad, thereafter there is greater peace." (G.T.W. Patrick, *Introduction to Philosophy.* p.38. See also Chapter XXIII of Brightman's *A Philosophy of Religion.*)

6. Drake, *Invitation to Philosophy,* p.13.

7. One could ask whether it would not be more appropriate to distinguish between 'philosophical logic' and 'the philosophy of logic' and divide the related problems into two groups. Read, for example, P. F. Strawson's Introduction to *Philosophical Logic* (Oxford, 1967)ed. by him, and W.V. Quine's *Philosophy of Logic* (Prentice-Hall, 1970).

8. Russell, *An Outline of Philosophy* (1927), P.46.

9. Wittgenstein, *Philosophical Investigations* (1968), Sec. 109.

Chapter III

1. The question whether philosophy is worth while seems to be a hall-mark of distinction between the current text-books on philosophy and those on other subjects. A consideration of this question is a common feature of the former, though not of the latter, which suggests that the utility and importance of philosophy are of late being viewed with an unprecedented degree of suspicion, while the utility of other sciences

remains far above question. Philosophers and philosophical writers distinctively deal with this question in order to justify their labour, and also probably to draw the reader's attention to philosophy. This is a state of affairs which is simply sad, and is in fact rooted in ignorance and misunderstanding about philosophy. For the present, let us listen to a writer of the land of supreme practical sense. "But after all, what is the use of philosophy? A shameful question; you do not ask it of poetry, which is also an imaginative construction of a world incompletely known." (Drake)

2. Man is by nature curious, and one of the basic points of distinction between man and the lower animals is that man seeks to know, while the latter do not, beyond the limits of what is essential to the bare struggle for existence. It is man alone who sings, paints, laughs—and, above all, thinks for its own sake. Humanity would certainly be miserably impoverished if he were robbed of his wealth of fine arts. And yet this wealth has very little justification outside itself. It is, therefore, no discredit to philosophy if it is sought, if at all, for its own sake. "If minds were made for thinking, then philosophy is its own excuse for being." (Drake) One could even say, with Aristotle, that philosophy is to be sought for its own sake because there is no higher end, and vice versa.

3. In fact, philosophy is everywhere working surreptitiously in our life even in such non-academic matters as our choice of political parties. As Gilbert Chasterton puts it; 'We think that for a landlady considering a lodger, it is important to know his income, but it is still more important to know his philosophy. We think that for a general about to fight an enemy, it is important to know the enemy's numbers, but still more important to know the enemy's philosophy. We think the question is not whether the theory of the cosmos affects matters, but whether, in the long run, anything else affects them'. (Heretics)

Some sort of philosophy—even a philosophy of that 'unseen reality'—is at the disposal of every normal human being as the basis of his life-struggle. The philosophical are 'questions which few men ask, and all men answer'. Thus philosophy is something which we not only must have but actually do have. It is therefore advisable to have it with a right-thinking open mind, without living in the fool's paradise of uncritically accpeted dogmas.

4. Philosophy is neither unwanted, nor impossible. No comparison of philosophy with science will show its reverse. Science itself is primarily theoretic; its history is also a history of gradual progress through the replacement of older theories by new ones. We forget the distinction between applied sciences and science as such when we boast of the services of science

to life. Philosophy. if properly applied, might have earned a similar, if not a greater, appreciation. And, in fact, this application of philosophy is the gravest need of the hour in this present state of global unrest.

It must be noted that the greatest hurdle in the way of philosophy is the very nature of its questions. The questions are of such an ultimate and comprehenesive nature that it is not possible to answer them by a simple appeal to experience, or even by current scientific experiments. This becomes apparent when a Persian poet compares the world to an old manuscript whose first and last few chapters are lost. The philosopher's business is comparable to the arduous task of recovering those lost chapters. This must be considered in our assessment of the merit and success of philosophical inquiry. But, whether already answered or not, the questions remain important. As Bertrand Russell so aptly remarks, humanity is poor if the questions cannot be answered at the moment; but they are poorer, if the questions are forgotten.

'In any case, whatever our chances of success, we shall not be deterred by the failures of those who have gone before. What if Peary, or Lindberg, had listened to counsels of dispair? Suppose *all* past philosophy has failed—what then! We are at the very beginning of the quest. We may be very sure that men, while they are men, will never give up the intriguing and tantalizing task of trying really to understand themselves and this mysterious universe which is their home.'

(D. Drake, *Invitation*, p.26)

Note that the contemporary trend, particularly among the logical possitivists, is to claim that the traditional problems of philosophy which are metaphysical in the wider sense of the term are pseudo-problems. They belong to science, if to anything, and can be solved by science, if at all.

5. H. Mead, *Types and Problems of Philosophy*, p.14.
6. Russell, *History of Western Philosophy*, p.11.
7. Vide—Will Durant, *The Story of Philosophy* (1954), p.xxvi.

Chapter IV

1. Preface to the second edition of *his Critique of Pure Reason*, p.20.
2. *Ibid.*, p.32.
3. Stace, *A Critical History of Greek Philosophy*, p.55.
4. Descartes, *Principles of Philosophy*, part I.
5. —*Discourse on Method*, Part II.
6. : Russell, *The Problems of Philosophy*, Chap.VI, pp. 65-66.

Again : "It is important to realise the fundamental position of probability in science. At the very best, induction and analogy give

probability." (*An Outline of Philosophy*, p.285).

7. Robert R. Ammerman, ed., *Classics of Analytic Philosophy* (1965), p.1.

8. Vide—Morton White, ed., *The Age of Analysis* (Mentor Books, 1955), Preface.

9. Ayer, *Language, Truth and Logic* (1935, 1964), p.60.

10. Ryle, "Systematically Misleading Expressions," reprinted in *Logic and Langauge*, ed. by Antony Flew (Anchor Books, 1965), p.39.

Chapter V

1. Ayer, *The Concept of a Person and Other Essays* (1962), p.41.

2. *Loc. cit.*

3. *Ibid.*, p.42.

4. An interesting example of Reductio can be found in Syed Mujtoba Ali's *Panchatantra* (Student Ways, Bangla Bazar, Dhaka, 1981), pp.97-98).

5. Passmore, *Philosophical Reasoning* (Duckworth, London, 1961), pp. 21-22. I am indebted to this book for much of the content of this chapter.

6. *Ibid.*, p.33.

7. Bradley, *Appearance and Reality* (1893), p.18.

8. Popper, *The Logic of Scientific Discovery* (1935, 1959).

9. Hospers, *An Introduction to Philosophical Analysis*, 2nd ed., 1967, p.213.

10. Passmore, *op. cit.*, p.81. The expression 'Arguments to meaninglessness' is his coinage.

11. Ayer, *Language, Truth and Logic*, 2nd ed. (Dover Publications, 1946), p.35.

12. cf. Rudolph Carnap, "The Elimination of Metaphysics through a Logical Analysis of Language" (1932), in Ayer, ed., *Logical Positivism* (1959).

13. Gottlob Frege, *Foundations of Arithmetic*, p.40; quoted in Passmore, *op. cit.*, p.102.

14. Donnellan "Paradigm-Case Argument," *Ency. of Philosophy*, ed. by P. Edwards, Vol.VI.

15. Vide—Malcolm, "Moore and Ordinary Language," in *The Philosophy of G.E. Moore* (1942-1952) ed. by P.A. Schilpp.

16. Flew, *Essays in Conceptual Analysis* (Macmillan, 1966), p.20.

17. Russell, *The Problems of Philosophy* (1912), Chap.VI, p.68.

18. Paul Edwards, "Bertrand Russell's Doubts about Induction," *Mind*, 1949; reprinted in A. Flew, ed., *Logic and Language*, p.61.

19. Nowell-Smith, *Ethics* (Pelican, 1954), pp.72-73.

20. *Ibid.*, p.74.

21. Vide—Jaako Hintikka, "Cogito Ergo Sum : Inference or Performance?", *The Philosophical Review*, LXXI, 1962; reprinted in Sesonske and Fleming, eds., *Meta-Meditations* (1966).

22. Passmore, *op. cit.*, p.8. Wittgenstein remarks in his *Investigations* (sec. 127) : "The work of the philosopher consists in assembling reminders for a particular purpose." Although this unmistakably sounds like an exaggeration, the great importance of reminding in philosophy remains indubitable.

23. Passmore, *op.cit.*, p.9.

24. Pitcher, *The Philosophy of Wittgenstein* (1964, 1972), p.252.

25. Ayer, *The Concept of a Person and Other Essays*, pp.18-19.

26. Passmore, *op. cit.*, p.118.

27. Warnock, "Verification and the Use of Language" (1951), reprinted in *A Modern Introduction to Philosophy*, ed. by Paul Edwards and A. Pap, p.724.

28. Passmore, *op. cit.*, p.98.

Chapter VI

1. *Introduction to Philosophy*, p.327.

2. *Ways of Knowing*, p.44.

3. These tests are, in other words, so many 'arguments' by which an authority is defended. These arguments apply to religious authorities, besides applying generally. But in religion there are some other special arguments such as 'the argument from intrinsic worth', the Ipse Dixit argument, argument from prophecy, and so on. The interested reader may consult D. Drake's *Invitation to Philosophy*, pp. 6-15.

4. This is not the mystic's intuition. That we have the first principles from intuition simply means that they are revealed to us, in Descartes' language, by the 'natural light of reason'; they are contained in the very structure of thought; to think is to be

5. Hume admits one exception to this rule, but still does not abandon his general maxim that "all our simple ideas in their first appearance are derived from simple impressions."

(*Treatise*, Bk.I, Part I, Sec.I)

6. The relative merits and demerits of empiricism are generally pointed out by those—e.g., Kant—who seek to synthesize them in a fresh epistemological theory. The text-book writers often or usually accept this position and present certain arguments accordingly. In order to keep the readers away from unnecessary subtleties at this stage, I have offered only

some general comments.

7. Two things may be noted : (a) Besides sensibility & understanding, Kant speaks of a third faculty, viz., reason. There are three 'ideas of reason'—world, soul and God—by which our judgments are brought under a still higher synthesis. But these ideas have no cognitive but only a 'regulative' value. (b) Kant maintains that while our knowledge of 'things' is a joint product of sense and reason, our knowledge of moral principles is purely rational.

8. The account of this synthesis that has been presented here is partial and incomplete; a complete account would take us into deeper issues which have been avoided here.

9. È.G. Paulsen calls his position 'formalistic rationalism'.

10. Russell, *Mysticism and Logic* (1917), pp.16,20.

Chapter VII

1. By his method of doubt Descartes arrives at the existence of self—'I think, therefore, I am'—and asks: Why am I so certain about it? The reply is : Because it is so clear and distinct. 'In this first knowledge, doubtless, there is nothing that gives me assurance of its truth except the clear and distinct perception of what I affirm, which would not indeed be sufficient to give me the assurance that what I say is true, if it could ever happen that anything I thus clearly and distinctly perceived should prove false, and accordingly it seems to me that I may now take as a general rule, that all that is very clearly and distinctly apprehended (conceived) is true.' (Meditation II, p.96).

2. 'For instance, Johnny's mother tells him not to go in swimming; but he goes and then, tells her that he did not go, and then buttressing his statement with that of his pals, builds up a chain of evidence to support his lie that makes it seem to his mother to be a coherent and consistent system, his own statement fitting in perfectly with all the other elements in the situation. All the parts of this system are coherent, and yet we could not say that the various statements are true. If we say that the several parts are not coherent with the original act, then we are going back to the correspondence theory' (Patrick, *Introduction to Philosophy*, p.375)

3. Bertrand Russell, *The Problems of Philosophy* (1912), p.129.

4. W. James, *Pragmatism*, p. 201.

5. *History of Western Philosophy*, p. 833.

Chapter VIII

1. He showed, for example, that multiplicity is impossible because it

implies contradictory propositions. If the many is, it must be both infinitely small and infinitely large (or both limited and unlimited). It must be infinitely small because it is composed of units; but units, to be units, must be indivisible and hence without any magnitude. Again, it must be infinitely large, because it has magnitude which is divisible into an infinite number of parts; and hence it is magnitude multiplied by infinity.

2. Patrick, *Introduction to Philosophy*, p.48.

3. Caird, *Philosophy of Religion*, p.23.

4. Russell, *History of Western Philosophy*, p.11.

5. See his *History of Western Philosophy*, Chap. XVI.

6. There is a tripolarity of thing, substance and quality. Substance is the basic substratum which possesses the qualities, and qualitites are its determining attributes. A thing is the complete object combining substance and quality, but there are logical difficulties in these concepts, to which Bradley (among others) draws our attention in his work, *Appearance and Reality*.

Chapter IX

1. For a brief but enlightening account the reader may go through Chapter VII of Patrick's *Introduction to Philosophy*.

2. D. Drake, *Invitation*, p. 186.

3. *Space, Time and Deity* (Vol. II), p. 44.

4. "The non-mathematician is seized by a mysterious shuddering when he hears of 'four-dimensional' things, by a feeling not unlike that awakened by thoughts of the occult. And yet there is no more commonplace statement than that the world in which we live is a four-dimensional space-time continuum." (Einstein—Relativity.)

Chapter X

1. *The Science and Philosophy of the Organism* (1908), p.112.

2. *The Bible of Naute*, p.100.

3. cf. Cunnigham's *Problems of Philosophy*, p.230.

4. *Science and the Modern World* (1925), Chap.VI, p.105.

Chapter XI

1. The problem is given no further treatment for want of space. The first-being must be a 'necessary' being. But at once there arise two broad questions : Are we really bound to conceive of a necessary being? If so, what is it like, and how does it affect the nature of the world of 'concrete' facts? To many, existence is always contingent, and necessary being is but

a contradiction in terms. But if so, the origin of the world remains inexplicable.

2. cf. Emanationism or the doctrine of creation as emanation, first propounded by Plotinus the neo-Platonist, and later on adopted by some Jewish, Christian and Islamic thinkers.

Chapter XII

1. Thomson and Geddes, *Evolution*, p.114.

2. *First Principles*, 6th ed., para. 144.

Chapter XIII

1. *The Order of Nature*, pp.190, 192.

2. Joad, *Guide to Philosophy*.

Chapter XI

1. We must not, however, suppose that *all* these positions have been actually upheld by some philosopher or other. For example, we do not know of any philosopher who has maintained the position of quantitative or perfect dualism, although these appear in modified forms in theology, known as Ditheism or Dualistic Theism. (See Chapter XXIV). This systematic classification has been given in order to help the understanding of the ontological problems and also of the solutions that have actually been offered.

2. These words, 'monism', 'dualism' and 'pluralism', are ambiguous. The word 'monism' was first used in Ontology by Christian Wolff (1679-1754). But, besides the ontological sense, 'monism' and 'dualism' have other senses also—epistemological, moral and theological. The word 'pluralism' is also used in theology to mean the theory of many gods.

3. *A Pluralistic Universe*, p. 322.

4. *Pragmatism*, p.160.

5. "There is no possible point of view", says James, "from which the world can appear an absolutely single fact. Real possibilities, real indeterminations, real beginnings, real ends; real evil, real crises, catastrophes, and escapes, a real God, and a real moral life, just as commonsense conceives these things, may remain in empiricism as conceptions which that philosophy gives up the attempt either to 'overcome' or to reinterpret in monistic form." *(The Will to Believe*, p.9)

But James does not regard the world as a sheer multiverse. As he says, "The great point is to notice that the oneness and the manyness are absolutely co-ordinate...." The world is "neither a universe pure and

simple nor a multiverse pure and simple." *(Pragmatism).*

6. G.T.W. Patrick, *Introduction to Philosophy*, p. 232.

7. Heracleitus (535-475 B.C.) maintained that the permanence and identity of things are illusory. 'All is flux'. 'Into the same river we go down, and we do not go down; for into the same river no man can enter twice; ever it flows in and flows out.'

8. *Creative Evolution*. p. 5.

9. "Like advertisers, he relies upon picturesque and varied statement, and on apparent explanation of many obscure facts. Analogies and similes, especially, form a very large part of the whole process by which he recommends his view to the reader. The number of similes for life to be found in his works exceeds the number in any poet known to me." *(History of Western Philosophy*, p.827). Again he says: "Of course a large part of Bergson's philosophy, probably the part to which most of its popularity is due, does not depend upon argument, and cannot be upset by argument. His imaginative picture of the world, regarded as a poetic effort, is in the main not capable of either proof or disproof. Shakespeare says life's but a walking shadow, Shelley says it is like a dome of many-coloured glass, Bergson says it is a shell which bursts into parts that are again shells. If you like Bergson's image better, it is just as legitimate." (*Ibid.*, pp.837-38.)

10. We find a crude form of half-hearted neutralism in the Ionic thinker, Anaximander. He is primarily a materialist, since he said that everything is made of matter. But he may be classed as a neutralist insofar as he maintained that matter is devoid of any denfinite features. It must be noted, however, that neutralism has a very small number of representatives.

11. Russell, *An Outline of Philosophy*, p. 239.

Again : "Mind and matter alike are logical constructions; the particulars out of which they are constructed, or from which they are inferred, have various relations, some of which are studied by physics, others by psychology." (Russell, *The Analysis of Mind*, p. 307.)

Chapter XVI

1. Hornle, *Matter, Life, Mind and God*, pp. 98-9.

2. *A History of Philosophy*, pp. 350-51.

3. *The Riddle of the Universe*, p. 220.

4. "My dialectical method is not only different from the Hegelian, but is its direct opposite. To Hegel, the process of thinking, the Ideal, is the creator of the real world and the real world only the external, phenomenal

form of 'the Idea'. With me, on the contrary. the ideal is nothing else than the material world, refected by the human mind, and transformed into forms of thought." (Marx : *Kapital*, p. 30.)

5. It is curious to note that the arguments for and against a doctrine affect and are inversely affected by those for and against its opposite. Materialists and idealists are therefore the greatest critics of each other.

Since, however, there are numerous idealists and a great many idealistic schools, all the idealistic criticisms of materialism cannot be accommodated here. We shall attend only to a few of them. But in the main we shall present the way the materialistic position has been examined from the standpoint of consistency and fulfilment of the basic requirements, viz., the explanation of life and mind. Some details of this will occur in their appropriate places, i.e., our considerations of life and mind.

6. "In our judgments we are forced back finally to the facts on which our arguments are based, and that is as far as we ever can get. If men differ about facts, their arguments are hopeless. The most we can do is to point directly to the facts involved, and ask our opponent whether he sees them. If he does not, it is time to stop talking and seek more profitable employment."

(Marvin, *An Introduction to Systematic Philosophy*, p.193)

7. 'The sum total of evidence furnished by materialism amounts only to a theory of the relation between mind and body. That an absolute uniformity of co-existence obtains between the activities of our brain and our mental states, no one will deny. But a relation of uniformity is not one of identity. Here lies the whole battle. Are thoughts brain actions? Are thoughts moving molecules? If any man persists in maintianing that they are, we can ask him, where are the facts? Did he ever see brain molecules move? "No". Did he ever observe his own thoughts? "Yes". If the two are identical, then he must have seen both. He contradicts himself.'

Again—'Are mental states and brain motions identical? Look and see. Direct observation, not argument, alone can tell... . The two seem worlds apart. By my thoughts I mean my thoughts, and not gyrations of molecules.' (*Ibid.*, p. 192-193).

8. Paulsen, *Introduction*, p. 82.

Chapter XVII

1. 'The term appeared in the later 17th century to name (a) the theory of archetypal Ideas, whether in the original Platonic teaching or as incorporated into Christian-Platonic and Scholastic theism; (b) the epistemological doctrine of Descartes and Locke, according to which

ideas", i.e., direct objects of human apprehension, are subjective and privately possessed. Since this latter view put in doubt the very existence of a material world, the term began to be used in the early 18th century for acosmism (according to which the external world is only the projection of our minds), and immaterialism (doctrine of the non-existence of material being). Its use was popularized by Kant who named his theory of knowledge Critical or Transcendental Idealism, and by his metaphysical followers, the post-Kantian Idealists.' (Runes, *Dictionary of Philosophy*)

2. Patrick, *Introduciton to Philosophy*, p.213.

3. 'Absolutism' is the opposite of 'relativism' and has different meanings:

"1. Metaphysics : the theory of the Absolute (q.v.).

2. Epistemology : the doctrine that objective or absolute, and not merely relative and human, truth is possible.

3. Axiology : the view that standards of value (moral or aesthetic) are absolute, objective, superhuman, eternal.

4. Politics : Cult of universal sovereignty, located in the ruler." (Runes, *Dictionary*, p.2)

4. Hegel is really difficult to understand. "Hegel's Philosophy," says Russell, "is very difficult—he is, I should say, the hardest to understand of all the great philosophers." (*History*, p.757) For a brief account of the dialectical procedure of thought, however, the reader may turn back to Chapter IV. It is perhaps advisable for facilitating our understanding of Hegel to approach his system from its terminus. It is not probably too dificult to imagine a universal mind which holds together all finite human minds within itself. This universal mind is originally unconscious, while the particular minds are, as we see, not only conscious, but self-conscious, and possessed of so many qualities and faculties. How is it possible? The universal or absolute mind evolves (dialectically), and thereby realises its potentialities.

The word 'realisation' is very important, being used here in both of is usual senses. It means (a) the realisation of the potentialities of the spirit, (b) the apprehension of the spirit of itself. Both of these reach their final stage in man (and then, ultimately, in Hegel's philosophy). A man is a most complex and perfect structure having both a physical and a mental aspect. This synthesis of matter and spirit is virtually the synthesis of the Absolute Spirit, in which pure thought or logic is the thesis and Nature (which is the opposition and externalisation by the spirit of itself) the anti-thesis. Similarly, man's conscipusness of himself is, in fact, the self-apprehension of the spirit itself. This apprehension attains its culmination first in philosophical thought and then, finally, in Hegel's own system.

Hegel's theory appears in his work, 'Encyclopaedia' (1817). It is divided into three broad parts—Logic, Philosophy of Nature, and Philosophy of Spirit—which deal with the grand triad of pure thought, the physical Nature, and Spirit. Thought as thesis necessarily suggests Nature as its anti-thesis, but these two in turn resolve themselves under a higher synthesis, viz., Spirit. This synthesis does not seem difficult to understand, whether we accept it or not, only if we try to understand our own nature. We have a body, and yet we think. How could a body think or a thought be in a body? Nevertheless, it is a fact of experience. But how could body 'derive' itself from pure thought, or how could Nature be a mere opposition or externalisation of the spirit? This is difficult to accept or to understand, but this is what Hegel says.

This reminds me of what I sometimes say to my students as a sort of encouragement, whenever they complain of poor understanding. Failure to understand, I say, is not necessarily due to poor understanding; it may as well be due to poor ideas. False theories or inconsistent views are likely to be more difficult to understand than their true and consistent counterparts.

5. cf. "The Synthesis That Can Save Man", an article by Dr. G. C. Dev published in the Proceedings of the Pakistan Philosophical Congress, 1960.

Chapter XVIII

1. Berkeley, *Principles of Human Knowledge*, Sec. 27.

2. Prof. Gilbert Ryle of Oxford University. A category mistake is the mistake of assigning something to a category to which it really does not belong. According to Ryle, Descartes' theory of mind as a substance commits this mistake because mind is not, in fact, a distinct entity within the body but is only a general name for certain features of our behaviour. (See—his *The Concept of Mind*, Chap.I, and Chap.V, Sec.5 of this book,)

3. Hume, A *Treatise of Human Nature* (BK.I, Part IV, Sec. 6.)

4. *Loc. cit.*

5. *An Outline of Philosophy*, p. 296.

6. Russell, *History of Western Philosophy*, p. 688.

7. 'Carrying out the implications of Hume's skepticism and ironing out the paradoxes involved in his exposition (such as the use of "my" and "I"—possessors of impressions) we might proceed as follows: With chalk in one hand and an eraser in the other, mark the blackboard as representing a given impression and while a second mark is being made (a second impression), erase the first, and so on. To represent sleep, erase the last mark and the picture is complete. Shades of shades—the self (even before

sleep) has vanished between each perception, there being no "my" perceptions. There can no longer be any point to skepticism itself; for there is no skeptic to be skeptical!' (Hocking, *Types of Philosophy*, p. 390.)

8. *An Introduction to the Philosophy of Religion*, pp. 112-115.
9. *Prolegomenon to Ethics*, p. 112.
10. *Space, Time and Deity*, Vol. II, p.9.
11. *Ibid.*, pp.6-9.
12. See his *The Idea of God* (Oxford, 1917).
13. *Invitation to Philosophy*, p. 378.

Chapter XIX

1. The second aspect of the problem may be differently viewed. In fact, an answer to the question of man's essence involves an answer to the problem of body-mind relation, since man appears to our experience to have both a physical and a mental aspect, and philosophy as an interpretation of experience cannot ignore this; and then, a complete treatment of the body-mind relation means an answer to *both* of these aspects. In other words, a consideration of the problem of body-mind relation brings in all the theories of soul and human nature considered in the preceding chapter. Conversely, any of those theories, being a theory of the soul, is at once a theory of the relation between body and mind which forms the subject-matter of the present chapter.

For example, epiphenomenalism, which has been considered an answer to the question about the soul, is at once an answer to the question of body-mind relation also. To the first question its answer is that mind or consciousness is only a by-product of cerebral functions; to the second, that consciousness is caused by the body, but it has itself no effect upon the body, being a mere shadow accompanying the cerebral functions.

These problems are, however, often confused. We have chosen to take a limited view of the problem of body-mind relation, for fear of repetition of much of what is already said in the preceding chapter. From our standpoint, the choice is probably quite justified.

2. Cunningham, *Problems of Philosophy*, p. 282.
3. *Matter and Spirit*, p. 138.
4. It is apparent that the word 'parallelism' has been taken here in a wide sense to include two different types of theories. In one of these types (as in Leibniz), body and mind have been regarded as two entities, though not of two opposite kinds; in the other (as in Spinoza), as two different aspects of the same entity. The latter view is also known as the *Identity Hypothesis*.
5. *Types of Philosophy*, p. 226.

Chapter XX

1: There is a popular proverb which says: If God destroys you who can protect? And if God protects you who can destroy?

Omar Khayyam, the famous fatalist, wrote:

The Moving Finger writes, and having writ
Moves on : nor all thy Piety nor Wit
Shall lure it back to cancel half a Line,
Nor all thy Tears wash out a word of it.

"Thus", a story goes, "a woman believed that she was fated to be drowned at sea, and when a steamer in which she had taken passage was wrecked, she refused to enter a life-boat, because, as she said, she would only bring disaster to the others in the boat."—T. De Laguna.

2. But this is an extreme view. In fact, there are contradictory verses in the Quran over the problem of will (compare, for example, the 79th verse with the 88th of Chapter III). The generally accepted view, however, is that God has granted man a certain measure of freedom, and the duty of man is to try and do his best and leave the rest to God. And, in general, the Indian thinkers have emphasized 'chesta' rather than 'daiva'.

"Conceive, I beg, that a stone, while continuing in motion, should be capable of thinking and knowing that it is endeavouring, as far as it can, to continue to move. Such a stone, being conscious merely of its own endeavour and not at all indifferent, would believe itself to be completely free, and would think that it continued in motion solely because of its own wish. This is that human freedom, which all boast that they possess, and which consists solely in the fact, that men are conscious of their own desire, but are ignorant of the causes whereby their desire has been determined." (Spinoza)

3. *Invitation to Philosophy,* p.398.

4. *Treatise,* Bk. II, Part III, Sec.I

5. W. Lillie, *An Introduction to Ethics,* pp.252-253.

6. Alexander, *Space, Time and Deity,* p. 352.

7. Let a man make the following deliberation : 'The determinist says that I can never be free. But I shall not yield to that. I have so far been an honest man, and always abhorred lying. But to-day I shall tell at least five lies and harm at least one of my dearest friends.'

Let us suppose that he does just as he decides. Has he not acted at least in this one case as a free individual? If not, we do not know what freedom or its proof can possibly mean, or how genuine experience is to be distinguished from illusion.

8. This word must be taken with caution. Determinism is also often called self-determinism. In some text-books a distinction has been made

between determinism and self-determinism, confusing the former with fatalism. This must be carefully avoided. We have called the concluding view self-determinism, reluctantly and just for want of a better word.

Chapter-XXI

1. James, *Human Immortality*, p 5.
2. *An Introduction to Systematic Philosophy*, p. 150.
3. James, *Human Immortality*, p. 12.
4. Plato offers as many as ten arguments. For a brief exposition, see W. A. Hammond's article on Immortality in *Encylopaedia Americana.*
5. *Principles of Human Knowledge*, Section 141.
6. *Space, Time and Deity*, (Vol, II), p. 423.

Chapter XXII

1. The class-terms—logical value, moral value, etc.—are also taken in the plural. Under 'moral value', for example, such values as justice, truthfulness etc., are enumerated. But we may take them in the singular also.
2. Alexander, *Space, Time and Deity.* Vol. II, p. 208.
3. W. James, *Will to Believe*, p. 61.

Chapter XXIII

1. *Esthetic*, p. 50.
2. H.S. Langfeld, *The Aesthetic Attitude.*
3. William Knight, *The Philosophy of the Beautiful*, Part II, p.8.
4. *Space, Time and Deity*, p. 293.
5. Kant, *Fundamental Principles of the Metaphysic of Morals* (1785), Sect. II.

Chapter XXIV

1. Brightman, *A Philosophy of Religion*, p. 116.
2. *Ibid.* , p. 17
3. Ferm, *First Adventures in Philosophy*, p. 57. The author is conscious that such regard for immediate interests is rare. It may be noted that his view reflects the symbolic sense in which 'religion' is sometimes used in ordinary conversation. We say: 'Music was his religion', 'Reading should be the religion of a student', and so on.
4. On this point, read Brightman's *A Philosophy of Religion*, pp.82-83. In this section we have followed Brightman very closely. The quotations are taken from his work.
5. 'Say: whoever is the enemy of Gabriel—for surely he revealed it to

your heart by Allah's command..... (Quran, Chapter II : 97) 'And the angel answering said unto him, I am Gabriel, that stand in the presence of God; and am sent to speak unto thee, and to shew thee these glad tidings.' (The Bible—Luke I : 19) Revelation through Gabriel is mentioned also in some other places of the Quran and the Bible.

6. For details read his work, *The Idea of the Holy* (trans.), 1923.

7. Alexander, *Space Time and Deity* (Vol.II), p. 376.

8. For details see his *The Psychology of Religion*, Chaps. II-VI.

9. cf. S.L. Hart, *Treatise of Values*, p.137.

10 Read— Andrew D. White, *History of the Warfare of Theology with Science* (New York).

11. *A Philosophy of Religion*, p. 487.

12. Radhakrishnan, *Contemporary Indian Philosophy* (Rev. ed., 1952), p. 492.

13. Dev, *Aspirations of the Common Man*, p. 45.

14. *The Natural History of Religion* (1755) and *Dialogues Concerning Natural Religion* (1799)

15. *Philosophy of Religion*, p. 64.

16. Hart, *Treatise on Values*, p. 143.

17. cf. Cunningham, *Problems of Philosophy*, Chapter XVI, Section 2.

18. Wright, *A Students' Philosophy of Religion*, p.1.

Chapter XXV

1. In Islamic terminology monotheism is called 'tawhid'. This is brilliantly expressed in the following verses of the Quran: "Say : He, Allah, is One. Allah is He on whom all depends. He begets not, nor is He begotten. And none is like Him."

2. Brightman, *A Philosophy of Religion*, p. 140.

3. John Dewey, *A Common Faith*, p. 42.

4. There are other senses of 'deism' (from L. 'Deus'= God). It is also applied to the view of Lord Herbert of Cherbury and Barthianism (the view of Karl Barth) developed in the 19th century.

5. Armstrong, *God and the Soul*, p. 44.

6. James Martineau, *A Study of Religion* (Vol. II), p. 135.

7. Of course, sometimes we hear people say things which have a pantheistic ring. The worship of nature and the Hindus' identification of 'nara' (man) and 'Narayana' (God) are also cases in point.

8. Emerson, in his poem 'Brahma', writes:

"They reckon ill who leave me out;
When me they fly, I am the wings;

I am the doubter and the doubt:
And I the hymn the Brahmin sings."

9. W.K. Wright, *A Student's Philosophy of Religion*, p. 373.
10. Pringle-Pattison, *The Idea of God*, Lect. XV, p. 240.
11. Martineau, *A Study of Religion*.
12. Wright, *op. cit.*, p.372.
13. *Wright, op. cit.*, pp. 375-76

Chapter XXVI

1. Here atheism is taken in a narrower sense. Ordinarily, atheism means disbelief in God as conceived in popular religion. In that sense, not only a pantheist but even a philosphical theist or a panentheist would be branded as an atheist. In fact, atheism is understood from different standpoints. Consequently, the word is relative and has different meanings. It menas, disbelief in God, disbelief in a 'personal' God or disbelief in popular God. Spinoza was condemned as an atheist; but the same man has been described as 'God-crazed'.

2. This and some other quotations have been taken from Max Rosenberg's *Introduction to Philosophy*, Chapter VIII.

3. *Philosophy of Religion*, p. 202.

4. Russell, *History of Western Philosophy*, Chap.XI, p. 610. Also read pp. 608-612.

5. Mohammad Iqbal, *Reconstruction of Religious Thought in Islam*, p. 28. The reader may go through the entire Chapter V of Caird's *Philosophy of Religion* for valuable criticisms.

6. *History of Western Philosophy*, pp. 609.

7. Both of these quotations are from Kant's *Critique of Pure Reason*, pp.363-65.

8. *Student's Philosophy of Religion*, p. 383. The reader may consult the entire section for a beautiful exposition of the argument.

9. *Ibid.*, p. 349.

10. W. James, *The Will to Believe and Other Essays in Popular Philosophy* (1897).

11. Russell, *History*, p. 846.

12. Two things must be noted :

(a) These arguments have not always been named and classified in the same way. This is possible, too. The teleological argument was called by Kant physico-theological. Descartes' causal proofs have been called anthropological by a critic. The term 'ontological proof'—illegitimately perhaps—has been extended to some other proofs (cf. Caird).

(b) There are some other arguments than those already considered, e.g., the idealistic arguments, Leibniz's argument from eternal truths, Prof. Royce's argument from the possibility of errors, etc.

13. *Student's Philosophy of Religion*, p. 389.

Chapter XXVII

1. James Thomson in his *The City of Dreadful Night* :

"O Brothers of sad lives! they are so brief:
A few short years must bring us all relief:
Can we not bear these years of laboring breath?
Speak not of comfort where no comfort is,
Speak not at all : can words make foul things fair?
Our Life's a cheat, our death a black abyss:
Hush, and be mute, envisaging despair.
So says Whitman—
"I praise with electric voice.
For I do not see one imperfection in the universe,
And I do not see one cause or result lamentable at last."

2. Also Bruno says : "Thus all things are so constituted that they can in no way be better constituted and arranged.... To be sure, they may not seem so, if we consider the will and desire of the individual things..., but they are so if we regard the order of the universe as a whole."

3. "Is Life Worth Living?"—an article in his work, *Will to Believe*, p. 62.

James discovers the worth of life mainly in the possibility of the fulfilment of our religious demands, and that possibility is based by him upon the existence of a spiritual sphere surrounding us. But we cannot fully agree with him. We need not go as far as that in order to find our life worthy.

4. To the question 'Is life worth living?' there is a jocose reply: 'That depends upon the liver.' The answer is partly true if we mean by liver a part of our digestive system, but fully true if we mean our whole being.

5. (a) I have presented rationality (reason or reasonableness) as the only absolute intrinsic value, but for obvious 'reasons'. Rationality is alone absolutely binding on us, since to argue against it will itself rest upon rationality.

(b) Morality is no other than rationality of will or action. This is the view of Kant. He rightly contends that morality is an intrinsic value. But morality can be intrinsic only if it is some form of rationality. Hence, morality as a separate value is but an illusion. Ultimately, 'We shall be moral' means "We

shall be reasonable.'

(c) Our total good contains both rational and nonrational elements— in other words, both moral and non-moral elements. Let us try to understand this by an analogy. Suppose somebody says, "I shall be logical." But can he be logical except in thinking 'something'? Similarly, we say. 'We shall be moral'. But we cannot be moral in the air, but only in performing some activities. These activites must be directed to some concrete ends. To say that our end in all activities is morality is to leave the matter again in the air. Perhaps we do not live to be moral, but we are moral in order to live—to live the best kind of life. Can we have a scheme of moral living in which morality itself is the 'end' or which suggests the end absolutely *a priori?* We eat, we play, we love, we think—and morality or rationality is everywhere the guiding factor. In brief, morality is the 'way' but not the goal.

We may have the illusion that morality is thereby made a mere 'slave' of some other end, that therefore morality is degraded or even lost. In fact, morality is not made a slave, since we cannot violate its principles in seeking or choosing between our particular goals. Morality remains the King, the Governor. The subjects of a King act in accordance with the command of the King, but do they eat in order to fill the King's belley?

Happiness has been said to be the non-moral element in our total good. What else could it be? Could it be unhappiness instead?

(d) Obviously, the primary values such as reasonableness, truthfulness and justice are not ends in the sense in which secondary values are. We do not live, for example, in order to be truthful. Rather we are truthful in order to live a good and happy life.

If one discovers some circularity in this notion of our goal of life, my answer would be that this is inevtitable, since reason is essentially circular. We consider logical principles logically.

This is not, of course, the appropriate place for entering into the problem further. This answer to the moral problem has been advanced primarily as a working concept and a necessary step to the rest of the philosophy of life developed in this chapter.

One thing, however, may be noted with care. This view seems to be in utter conflict with the puzzle into which Kant throws the relation between reason and happiness. It is sufficient for the present to realize that happiness as such is a non-rational goal and that reason is certainly in conflict with the 'irrational' but not necessarily with the 'non-rational'.

6. Dr. G. C. Dev, *Aspirations of the Common Man* (1963), Chapter IV. The reader may be advised to go through this work and also his *Amar Jivan Darshana* (My Philosophy of Life, 1961) for a right assessment of

the present crisis and an inspiring remedy for the same.

7 This saucy phrase, 'happy marriage', I owe to Dr. G.C. Dev. He has very wittily developed the philosophy of this much-needed marriage in his works mentioned above. "Lop-sided growth," he aptly observes, "has been the bane of man's history." *(Aspirations,* p.1)

8. Our right to exploit the lower species is in a curious predicament, since they are incapable of considering our superiority (consisting in our capacity for higher values) and giving their opinion on the matter. If realisation of the higher values demanded our exploitation of them and they had willingly given their consent, the exploitation might have been justified. Survival of the fittest is the law of nature. The stronger species of carnivorous animals, for example, prey upon the weaker. But the law of wild nature is not the law of man. Hence our exploitation of lower animals poses a question which has been taken up seriously by some contemporary philosohers — by Prof. Singer of Australia, for example. Traditional religions have given a plain answer to it. But our 'good neighbours' might make an appeal to our reason.

9. We have not only divisions of labour or the division between East and West; but, curiously enough, we have class-distinctions among public servants, among ration-card holders; in hotels, entertainment houses and even in prisons; among railway passengers and even passengers to the land of Azraeel (the angel of death)!

10. "Prejudices in Our National Life"—an article published in the Proceedings of the Pakistan Philosophical Congress of 1964.

11. See the last Chapter of his *Aspirations of the Common Man.*

APPENDIX–C

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APPENDIX–D

A BRIEF HISTORY OF PHILOSOPHY

When and where did philosophy begin? This question must be interesting to a student of philosophy. A philosopher is not an ordinary thinker, but one who tries to think logically and systematically about a certian class of problems. So far as our knowledge goes, compared with the thousands of years of human existence, it is not too long ago that man began to think in this special sense. There is a controversy as to whether philosophy had its beginning in Greece in the 6th century B.C., or in India earlier than that date. Western scholars maintain that, although Indian Vedic systems are for the most part older than Greek philosophy, they are theological rather than philosophical in character, and hence philosophy must be said to have begun in Greece. Thus Bertrand Russell, for example, observes : "Philosophy, as distinct from theology, began in Greece in the 6th century B.C." (His *History of Western Philosophy*, p.XIV) Of late this view has been criticised by Indian scholars. Thus Maulana Abul Kalam Azad contends that there is proof that (a) there had already been a considerable development of Upanisad philosophy and (b) the foundations of some of the other Indian philosophical schools were already laid before the age of Gautama the Buddha. The Buddha lived (most probably) between 563 and 483 B.C. and the 'father' of Greek philosophy lived about the same time. "A study of the history of philosophy, therefore, leads to the unassailable conclusion that philosophical speculations began earlier in India than in Greece. The 6th century B.C. marks the beginnings of philosophy in Greece, but in India it is an age of considerable philosophical progress." (*History of Philosophy : Eastern and Western*, ed. by Radhakrishnan, p.20.)

It is to be noted that the Western scholars do not deny the existence of Indian systems but only their title to the name "Philosophy". But to an impartial view Indian systems appear to have the essential characteristics of philosophy, and hence their view does not hold good.

The germs of Indian philosophy, however, are contained in the *Vedas* which are the earliest available records of Indian literature (composed earlier than 1000 B.C.), and have influenced the whole growth of Indian

philosophy directly or indirectly. A considerable number of philosophical schools developed in India – namely, Carvaka, Sankhya, Nyaya, Mimamsa, Vedanta, etc. Indian philosophy grows from a practical and not merely intellectual motive, from an urge to live a spiritually excellent life; and, except for the Carvaka system, it has generally an otherworldly colour. Sankara, Madhva and Ramanuja are three of the most important thinkers and the Vedantic 'mayabad' the most renowned metaphysical system of early India.

Greek philosophy started with Thales who, as already indicated, was a man of the 6th century B.C., and came to and end with the Neo-Platonists in the 3rd century A.D. Thales was a materialist, but later on various schools of philosophy were developed by the Pythagoreans, the Sophists, the Eleatics and so on. Three historically important Greek philosophers are Socrates, Plato and Aristotle. Plato was a pupil of Socrates, and Aristotle of Plato. Plato received most of his root ideas from Socrates's teachings; and Aristotle built up a great idealistic system upon a foundation laid down by Plato. Some very interesting and historically important schools (viz.the Stoics, the Epicureans, the Sceptics, and the Neo-Platonists) developed during the post-Aristotelian period; but Greek philosophy may be said to have reached its climax in Aristotle. Almost all the great philosophical problems were raised by the Greeks and very ably discussed by them.

With Neo-Platonism philosophy in the West gives way to religion—to Christianity in particular. Religion now gains its supremacy in man's life, and it is only in the 9th century A.D. that philosophical activities were revived, though in an imperfect form, namely, Scholasticism. The philosophy of the whole Medieval period may be roughly described as scholastic; throughout, it shows an attempt at reconciling religion and philosophy, authority and free thinking, faith and reason. "The philosophical thought of this period mirrors the spirit of the times in assigning to tradition and authority a leading role; scholars swear by the Church, by Augustine, Plato or Aristotle, by their monastic orders or their schools. Accepting on faith the truth of the Church doctrines, and yet feeling a strong urge for philosophical speculation, they endeavour to harmonize the two by reading the Christian faith into their philosophies, or their philosophies into the Christian faith. The faith is, however, the beginning and end of their labours, theologoy the crown of all knowledge, the royal science." (F. Thilly, *A History of Philosophy*, Chap.VII, p.189) St. Anselm and St. Thomas Aquinas are the two most important Christian thinkers of this period. Muslim philosophy with its great exponents, such as Al-Farabi, Ibn Sina, Al-Ghazzali and Ibn Rushd, also belongs to this

period. In fact, for several centuries Muslim scholars, thinkers and authors dominated the intellectual field in the West, and it is through them that Greek culture was transmitted to the West leading to the growth of scholasticism.

However, although Greek philosophy brilliantly illustrates free thinking, it is not completely free from religious influence. Medieval philosophy is not only influenced but actually dominated by religion. In the philosophy of the modern period we find a revival of the Greek spirit. In essence and general trend, modern philosophy is allied to science rather than religion. It is harbingered by thinkers like Francis Bacon, and 'fathered' by the French philosopher Rene Descartes (1595-1650). Some of the characteristic features of this period are, in the words of Thilly, 'an awakening of the reflective spirit,' 'a quickening of criticism,' and 'a revolt against authority and tradition.' (*Ibid.*, p. 280).

From the very beginning of the modern era two opposite trends, rationalism and empiricism, came to prevail—the first in the European mainland, and the second in Great Britain. Descartes, Spinoza and Leibniz are the three great rationalists, and Locke, Berekely and Hume the three great empiricists of this period. In a way these opposite trends were synthesized by Kant towards the end of the 18th century. Kant, himself a German, was followed by two other German thinkers, namely, Fichte and Schelling, and finally by Hegel (1770-1831) who built up a most magnificent metaphysical system known as Absolute Idealism. Some other important thinkers of the 17th, 18th and 19th centuries are the occasionalists Arnold Geulincx (1625-1669) and Malebranche (1638-1715), the rationalist Christian Wolff (1679-1754), the realist Johann Herbart (1776-1841), the pessimist Schopenhauer, the positivist August Comte, the empiricist J.S. Mill (1806-1873), and the evolutionist Herbert Spencer (1820-1903).

Hegel's idealism, in spite of strong opposition in some quarters, exercised tremendous influnce on subsequent thought. During the latter half of the 19th and the first quarter of the 20th century the Neo-Hegelian school, represented by T.H. Green (1836-1882), Edward Caird, F.H. Bradley, and Bernard Bosanquet, was the most influential school in Great Britain. But subsequently idealism in the West gave way to realism, and rationalism to empiricism. The recent and the contemporary scene is marked with the rise of several philosophical trends—pragmatism, neo-realism, critical realism, logical positivism, existentialism, the analytic and the linguistic trends (these trends are not necessarily mutually exclusive) which may be said to have the common characteristic of opposing

metaphysical thinking (i.e. thinking about any transcendent reality) and speculative rationalism. This anti-metaphysical tendency is most vigorously represented by logical positivism which may be said to constitute a turning point in the history of recent philosophy. According to it, no factual statement is meaningful unless it is at least logically possible to verify it empirically. By this *verificationist criterion* of (cognitive) meaningfulness, logical positivism rejects all metaphysical statements as meaningless. Thus, for instance, the proposition, "God exists" or "The ultimate reality is spiritual," is not merely unproved but simply nonsense.

However, the traditional philosophical problems, except for the strictly metaphysical (ontological) ones, still find favour with contemporary thinkers; but the general tendency is to believe that all philosophical problems are, in the final analysis, logical or linguistic, and this has led to the development of *analytical* and *linguistic* philosophy. Some of the most important representatives of the recent and contemporary philosophical trends are Bertrand Russell, Samuel Alexander, C.D. Broad, G.E. Moore and Gilbert Ryle of Great Britain; Edmund Husserl, Ludwig Wittgenstein, Morris Schlick, Rudolf Carnap and Jean Paul Sartre of the European mainland, and C.S. Peirce, William James, John Dewey and George Santayana of America.

Philosophical activities in the East, though not as remarkable as in the West, are not inconsiderable. In the Indo-Pak-Bangladesh subcontinent the people have a long and rich cultural heritage, including philosophy and theology, and philosophy is sitll, on the whole, a popular and respectable subject. In addition to philosophical studies as a curricular option in the higher academic institutions, there are philosophical organizations and centres for philosophical research, and their total output is by no means negligible. Generally speaking, philosophers in this area are familiar with Western philosophy and show an interest in comparing and synthesizing the Eastern ideas with the former, in harmonizing faith and reason, and in bridging the gap between theory and practice. The result is that they are mostly inclined to idealism in some form or other. Indian philosophy, Muslim philosophy and Buddhist philosophy are extensively studied along with Western philosophy. Of late, in Bangladesh, some special attention is being paid to 'Philosophy of the Bangalees' or more narrowly to philosophical activities in Bangladesh, and some emphasis is being laid on applied philosophy in a broad sense. K.C. Bhattacharya and Sarvepalli Radhakrishnan of India, Allama Iqbal and Fazlur Rahman of Pakistan, and Dr. G. C. Dev of Bangladesh are a few of the eminent philosophers of this subcontinent.

It is, however, not true that philosophy has grown only in the countries referred to in this brief history. Philosophy, in its broader sense, is discoverable, in some form or other, in the culture of every great people. And indeed philosophy, as part of culture, has not only influenced but has itself been influenced by the other part of culture. This is one important reaosn, whatever other reasons there may be, why the whole history of philosophy has been marked with so much of difference of opinion, with the rise and fall of so many different thought-systems. One good lesson, however, that may be learnt from this is that truth, and especially philosophcial truth, is extremely elusive, that its discovery is a matter of far more care and toil than it seems, and that, therefore, we must not too easily get impatient of each other's opinions. The great blunders of the past are like signals to blind alleys: they tell us which way to go and which to avoid.

Further Readings :

Radhakrishnan, S. (ed.), *History of Philosophy: Eastern and Western*, Allen and Unwin, 1952.

Thilly, F., *A History of Philosophy* (Revised by Ledger Wood), Holt, Rinehart and Winston, New York, 1963.

Copleston, F., *A History of Philosophy*, Doubledey and Co., 1959.

Passmore, J., *A Hundred Years of Philosophy*, Duckworth, 2nd ed, 1966.

APPENDIX–E

BIOGRAPHICAL NOTES*

Alexander, Samuel (1859-1938). One of the greatest English metaphysicians—realist, empiricist, neutral monist, emergent evolutionist; believer in God in a sense. Born at Sydney, Australia; studied at Melbourne and Oxford; taught philosophy at Oxford, and for a long time at the University of Manchester; recieved the Order of Merit in 1930. Main work: *Space, Time and Deity* (1920).

Al-Ghazzali, Abu Hamid Muhammad (1058-1111). One of the greatest and most influential of Muslim thinkers—mainly a theologian. Born at Tus, Persia; started as a sceptic; became a most severe and powerful critic of traditional metaphysics; a great defender of religious (Islamic) dogmas, and finally a mystic. Main works : *The Inconsistency of the Philosophers (Tahafutu'l Falasifa); The Revival of the Religious Sciences.*

Anselm, St. (1033-1109). A defender of the Catholic doctrine, a typical schoolman trying to *rationalise* religious faith; best known for his much-discussed *ontological argument* for the existence of God. Born at Aosta, Italy; became Archbishop of Canterbury and occupied this post until his death. Main works : *Monologium, Proslogium; De Veritate.*

Aquinas, St. Thomas (1225-1274). Generally recognised as the leading philosopher of the Roman Catholic Chruch, as the greatest of the Schoolmen; a defender of religious faith on a philosophical basis; his authority officially established by Pope Leo XII. Born at Raccasecca, near Naples, Italy; was educated and taught in the University of Paris. Main works : *Summa Contra Gentiles* (1260); *Summa Theologica* (1265-72).

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* These brief notes have been included partly to show that philosophers have not been mere star-gazers but have often played an important role even in the narrowly-defined practical domain of man's history, and to throw some light on the great variety of non-philosophical training and occupation from which philosophy has drawn many of her most passionate lovers.

Aristotle (384-322 B.C.) The best-known and most influential of Greek philosophers—a realist and yet a teleological idealist; the founder of deductive logic as a distinct science; made the first clear classification of sciences and made original contributions to them: the leading philosophical authority during the Middle Ages. Born in Stagira, Macedonia; student of Plato, tutor of Alexander the Great. Main works: *Metaphysics; Prior Analytics; Posterior Analytics; Nicomachean Ethics, etc.*

Augustine, St. (354-430). The greatest thinker of the early Christain Church; dominated Western thought until the thirteenth century; developed a comprehensive Christian world-view in which patristic thought reached its culmination. Born in Tagaste, North Africa, of a pagan father and a Christian mother; converted into Christianity at 34; became bishop of Hippo (North Africa), and held this office until his death. Some major works; *On Free Choice; Confessions*; *City of God.*

Averroes (Muhammad Ibn Rushd: 1126-1198). One of the greatest Muslim philosophers—a rationalist, Aristotelian; a great believer in the synthesis of reason and faith, of philosophy and religion; wrote a famous reply to Al-Ghazzali's polemical work, *The Inconsistency of the Philosophers*; noted for his minute commentaries on all the works of Aristotle. Born at Cordova, Spain; had a training in Law and Medicine; became physician to Khalifa Yaqub Yusuf. Some major works: *On the Unification of Philosophy and Religion; The Inconsistency of the Inconsistency.*

Avicenna (Abu Ali Ibn Sina : 980-1037). Regarded by many as the greatest of all the philosophers writing in Arabic; an Aristotelian. Born at Bokhara, Persia; a versatile scholar at the age of 17; said to have read Aristotle's *Metaphysics* forty times and had it by heart without being able to understand it, and yet became a great Aristotelian metaphysician later on. At least in the West, his fame as a physician survived his fame as a philosopher. Main works: an eighteen volume encyclopaedia divided into four subjects— logic, physics, mathematics, and metaphysics; *The Soul*, a poem; *The Canon of Medicine.*

Ayer, Alfred Jules (b. 1910). The first renowned exponent of logical positivism in England—empiricist and linguistic analyst; rejects metaphysics and restricts the function of philosophy to analysis. Born in London; served in the military intelligence during the second World War; taught for many years at the University of

London: since 1959 professor of logic at Oxford and Fellow of New College, England. Main works: *Language, Truth and Logic (1936); The Foundations of Empirical Knowledge (1949).*

Bacon, Francis (1561-1626). First great British thinker representing the modern spirit—opposed to traditional authorities; well-known as the founder of the inductive method. Born in London; famous as one of the foremost English essayists; author of the first philosophical work in English. Chief works: *The Advancement of Learning* (1605); *Novum Organum* (1620); *Essays* (1597).

Bergson, Henri (1859-1941). One of the most influential French thinkers and writers; a temporalistic, anti-materialistic metaphysician; intuitionist, and creative evolutionist. Born in Paris, France, of a Jewish family; a famous novelist, and won the Nobel Prize in Literature in 1927; professor of philosophy at various schools in France. Chief works: *Matter and Memory* (1896); *Creative Evolution* (1907); *Two Sources of Morality and Religion* (1932).

Berkeley, George (1685-1753). Well-known for his subjective idealism based upon empiricism, and his arguments against the existence of matter—spiritual pluralist, theist: Born at Kilkenny, Ireland; made bishop of Cloyne in 1734; a powerful writer of English prose; contributed to the theory of vision. Main works: *A Treatise Concerning the Principles of Human Knowledge* (1710); *Three Dialogues between Hylas and Philonous* (1713).

Bradley, Francis Herbert (1846-1924). The best-known of the English idealists; rationalist, monist, absolute idealist, an exponent of the degrees of truth and reality. Born at Glasbury, Wales; spent most of his life at Oxford, both as student and a Fellow; a life-long bachelor; received the Order of Merit in 1924; well-known for his powerful philosophical prose. Main works: *Appearance and Reality* (1893); *Essays on Truth and Reality* (1914).

Comte, Auguste (1798-1857). Forerunner of contemporary (logical) positivism; his own theory was called by him positivism; opposed to metaphysical speculations, a champion of scientific investigations; founder of sociology. Born in Montpellier, France, in an orthodox Catholic Family; studied science; depended on writing and private instruction for livelihood (several attempts to obtain a professorship failed). Main work: *The Course of Positive Philosophy* (1830-42).

Descartes, Rene (1597-1650). Often regarded as the father of modern philosophy; one of the founders of modern epistemology, a

metaphysician, a remarkably original mind; rationalist, dualist, theist. Born at La Haye, France; spent nine years in travel and military service (meditated even at the headquarters of the army); went to Sweden to teach philosophy to Queen Christiana; a man of versatile scholarship; wrote on mathematics, physics, optics and music; died in Sweden. Main works: *Discourse on Method* (1637); *Meditations on First Philosophy* (1641).

Dev, Govinda Chandra (1906-1971) Well-known philosopher and humanist thinker of erstwhile East Pakistan, now an independent country known as Bangladesh; a synthetic idealist, an intuitionist in a sense; a believer in the unity of man and one-world government; an earnest advocate, like Socrates, of the practical applicaiton of philosophy. Born in Sylhet, Bangladesh; educated at the University of Calcutta; founder of the Dinajpur College; Head of the Department of Philosophy, and provost of the Jagannath Hall, University of Dhaka, for many years; taught for some time (1966-67) in Pennsylvania, U.S.A., as a visiting Fulbright professor; a bachelor of a remarkably unostentatious life. Chief works : *Idealism and Progress* (1952); *Idealism; a New Defence and a New Application* (1956); *Aspirations of the Common Man* (1963).

Dewey, John (1859-1952). One of the foremost American philosophers—a naturalist, and a humanist relating all philosophy to practical aims; well-known for his instrumentalism. Born at Burlington, Vermont, U.S.A.; taught in several universtities of the United States; renowned philosopher of education; contributed to psychology, religion and aesthetics. Chief works: *Reconstruction in Philosophy* (1920); *Human Nature and Conduct* (1922); *Logic : The Theory of Inquiry* (1939).

Hegel, Geroge W.F. (1770-1831). Generally regarded as the builder of the most magnificent of all metaphysical systems; rationalist, absolute idealist; made a most thorough application of the Dialectical Method; a believer in the unity of thought and reality; a pantheist; exercised great influence on the 19th and the early 20th century philosophy. Born at Stuttgart, Germany; taught philosophy in several universities; the editor of a newspaper and the director of the gymnasium at Nuremburg. Chief works: *Phenomenology of Spirit* (1807); *Logic* (1812-16); *Encyclopaedia of the Philosophical Sciences* (1817).

Hobbes, Thomas (1588-1679). Foremost materialist of the early modern

period—empiricist, mominalist, mechanist; denies the existence of any spiritual substance; and yet a believer in God in some sense, altough he denies the possibility of knowing the nature of God. Born at Westport in Malmesbury, England; the son of the Vicar of Westport; educated at Oxford; travelled extensively in the European mainland, and became acquainted with Descartes. Chief works: *On Bodies* (1655); *On Man* (1658); *Leviathan* (1651).

Hume, David (1711-1778). Best known and most influential of the modern empiricists—sensationalist, sceptic; much discussed now-a-days. Born in Edinburgh, Scotland; had no higher academic degrees; wrote his first and main philosophical work around the age of 25; served in several capacities; a life-long bachelor; a man of quiet, sober and amiable disposition. Chief works: *A Treatise of Human Nature; Enquiry Concerning Human Understanding* (1748).

Iqbal, Muhammad (1876-1938). Foremost Muslim philosopher-poet and religious thinker—well-known for his doctrine of Self, and as the dreamer of Pakistan. Born in Sialkot, Pakistan; died in Lahore; studied philosophy and law in England; practised as a barrister for some time, but earned reputation chiefly for his poetic and philosophical writings; not a star-gazing philosopher but seriously concerned with the welfare of mankind, particularly of Muslims. Chief works: *The Development of Metaphysics in Persia* (1908); *The Reconstruction of Religious Thought in Islam* (1934).

James, William (1842-1910). One of the most important and influential of Amercian thinkers—pragmatist, radical empiricist, pluralist, a believer in God and religious experience. Born in New York, U.S.A.; initially a medical graduate, later on interested in Psychology and Philosophy; taught for many years at Harvard; became widely known as a brilliant lecturer; remarkably contributed to psychology, besides being a great philosopher. Chief works: *Principles of Psychology* (1890); *Varieties of Religious Experience* (1902); *Pragmatism* (1907); *Essays in Radical Empiricism* (1912).

Kant, Immanuel (1724-1804). One of the world's greatest philosophers—transcendental idealist, a synthesizer of rationalism and empiricism; denies the possibility of metaphysics in the traditional sense; most widely discussed as an epistemologist and a moral thinker; a believer in God and absolute moral law. Born at Konigsberg, Germany; a small delicate body (hardly five feet tall),

but of profound scholarship and exceptional reputation as a teacher; a lifelong bachelor; scarcely travelled 40 miles from Konigsberg in his life-time; well-known for clock-like regularity; died in the same city. Chief works: *Critique of Pure Reason* (1781-87); *Critique of Practical Reason* (1788); *Critique of Judgment* (1789-93).

Leibniz, Gottfried Wilhelm (1646-1716). Greatest seventeenth century philosopher of Germany, and one of the most eminent thinkers of all times—rationalist, pluralistic, spiritualist, theist; best known for his theory of monads and his theory of Pre-established Harmony. Born at Leipzig, Germany; trained in mathematics, history, law, diplomacy and theology; had a cosmopolitan mode of life, and philosophised rather at "odd moments"; developed a symbolic system (but did not publish it since he was not sure of its merit) which is the forerunner of modern symbolic logic. No systematic exposition of his philosophy, but only a large number of essays, letters, memoranda, etc. Key works: *Discourse on Metaphysics* (1686); *New System of Nature* (1695); *Monadology* (1714).

Locke, John (1632-1707). The first great British empiricist — scientific realist, representative idealist, dualist, theist; well-known for his arguments against the doctrine of innate ideas; political, economic and religious thinker. Born at Wrington, England; studied philosophy, natural science and medicine at Oxford; held important public offices; a physician of considerable ability. Chief works: *An Essay Concerning Human Understanding* (1690); *Two Treatises on Civil Government* (1689).

Marx, Karl (1818-1883). Famous founder of the Communist philosophy (also called Marxism); co-founder with Frederick Engels of dialectical materialism; the most influential revolutionary in the economic and political thought of recent history. Born at Trier, Germany, in a Jewish family; educated at the Universities of Bonn and Berlin; lived as a political refugee in Paris, Brussells and finally in London (England) where he spent more than thirty years until his death. Chief works: *Economic and Philosophical Manuscripts* (1844); *The Misery of Philosophy* (1847); *The Manifesto of the Communist Party* (1848); *Capital* (1867-94).

Mill, John Stuart (1806-1873). One of the most important thinkers of the nineteenth century; extreme empiricist, nominalist, associationist, utilitarian; foremost logician—noted for his *Methods of Induction*. Born in London; well-known for most unusual precociousness;

learned Greek at the age of 3, studied Plato at 7, and became a versatile scholar at 15; educated personally by his father, James Mill, who was himself a philosopher and a writer; served in the East India Co. and held other important public offices; leading political philosopher of England of his time. Chief works: *System of Logic* (1843); *Essay on Liberty* (1859); *Utilitarianism* (1861).

Moore, George Edward (1873-1958). One of the most important and influential philosophers of contemporary times; dealt with problems of fundamental importance; neo-realist and ethical intuitionist. Born in London; fellow undergraduate with Russell at Cambridge; a Fellow of Trinity College at Cambridge, and subsequently Professor of Philosophy at the University of Cambridge; a man of quiet and graceful disposition; editor of the *Mind;* received the Order of Merit. Main works: *Principia Ethica* (1908); *Philosophical Studies* (1922); *Some Main Problems of Philosophy.*

Nietzsche, Friedrich (1844-1900). Well-known as a psychological philosopher, a philosopher of life, a critic of traditional moral and religious values, and as the propounder of the doctrine of "will to power" (i.e., self-aggrandizement as the all-embracing principle in both organic and inorganic nature) whose political implications are considered dangerous (cf. Nazi Germany under Hitler). Born at Rocken, Germany; son of a Protestant minister; educated at the Universities of Bonn and Leipzig; served as a professor at the University of Basel, Switzerland; served in the army for a short time; a bachelor and had a most unhappy life; was insane for more than a year right before his death. Key works: *Thus Spake Zarathustra* (1883-84); *Beyond Good and Evil* (1886); *The Genealogy of Morals* (1887).

Perry, Ralph Barton (1876-1957). One of the founders of American 'new realism', an important and influential humanistic theologist—a pragmatic believer in God and immortality. Born at Poulteny, Vermont U.S.A. ; professor of philosophy at Harvard University; during the first World War, a major with the War Department Committee on Education and Special Training; won the Pulitzer Prize in 1936 for his classic biography of William James. Chief works: *General Theory of Value* (1926); *Present Philosophical Tendencies; Shall not Perish From the Earth* (1941).

Plato (428/27-348/47 B.C.). One of the greatest of Greek philosophers (sometimes regarded as the greatest of them) or philosophers of all

times; noted for most original and influential contributions to metaphysics, epistemology, ethics, psychology, politics, etc.; idealist, rationalist, eudaemonist; a socialist in a sense. Born in Athens or Aegina, Greece; originally known as Aristocles called Plato for the breadth of his shoulder; aristocratic by birth and thought; disciple of Socrates, and teacher of Aristotle; had an adventurous youth but a quiet and happy later life; founder of a philosophical school in Athens, known as the Academy. Wrote 29 philosophical dialogues which not only speak of the great originality and analytic power of their author but have a remarkable literary charm. The most important of them: *Republic, Theaetetus, Protagoras, Philebus, Laws.*

Radhakrishnan, Sarvepalli (b. 1888). A renowned philosopher, scholar, writer, statesman, and religious thinker—a kind of synthetic idealist religiously inspired. Born in Tiruttani, Madras; educated at the Madras Christian College; professor of philosophy at the Universities of Mysore, Calcutta and Oxford; held eminent public offices including the presidentship of India. Works: *Indian Philosophy* (1923-27); *An Idealist View of Life* (1932), etc.

Russell, Bertrand, A.W. (1872-1970). Generally recognised as the greatest philosopher and one of the greatest minds of the 20th century—realist, empiricist, logical atomist; lectured widely and written voluminously on philosophy, mathematics and science, on socio-political, moral, religious and educational problems. Born at Trelleck, Wales; grandson of premier Lord John Russell; studied mathematics and philosophy at Cambridge, and taught at the same university; supremely interested in practical problems and responded whenever a major global issue arose; imprisoned for pacifist activities during World War I, and again recently for his campaign for nuclear disarmament; recieved the Order of Merit, and the Nobel Prize for literature (1950). Main works: *Principia Mathematica* (1910-13); *The Problems of Philosophy* (1912); *Introduction to Mathematical Philosophy* (1918); *An Inquiry into Meaning and Truth* (1940), etc.

Ryle, Gilbert (1900-1977). One of the important and influential living philosophers of England; a linguistic analyst, convinced that the clarification of concepts by means of linguistic analysis is the main function of philosophy. Born at Brighton, England; educated at Cambridge; sometime Chairman of the Department of Philosophy, University of Cambridge, and editor of the *Mind.* Key works: *The*

Concept of Mind (1949), *Dilemmas* (1964).

Sankara (788-820). Best-known and most influential thinker of medieval India—a monistic idealist, founder of 'mayabad' (doctrine of illusion); renowned commentator of the Upanishads. Born in Cochin, South India; a genius of wonderful intellectual gifts; became an ascetic in boyhood; travelled widely in India and tried to reform religious life by establishing an order of ascetics and four monasteries.

Schopenhauer, Arthuer (1788-1860). Renowned German philosopher, voluntaristic idealist; ethical negativist like Buddha; best known as the philosopher of pessimism; noted as a brilliant, though at times caustic writer. Born in Danzig, Germany; father a wealthy banker, and mother a novelist of considerable reputation; educated partly in England; lecturer at the University of Berlin, but unsuccessful as a teacher; a bachelor of an unhappy life. Chief work: *The World as Will and Idea* (1819).

Socrates (469-399 B.C.) The most influential teacher of philosophy in ancient Greece; noted for his dialectical method (the method of teaching or bringing out latent knowledge by putting questions systematically, which has been illustrated by Plato in his Dialogues); emphasis on Definition, and ethical speculations; interested mainly in moral and political issues. His father was a sculptor, and mother a midwife; himself a midwife, as he used to say; in the intellectual sphere; lived a most unostentatious life; a man of saintly character, he lived up to the moral philosophy he preached, and virtually sacrificed his life for its sake; sentenced to death on the false charge of corrupting the youth, and killed by poison. Left no writings; his views can be known mainly from Plato's Dialogues and Xenophon's Socratic works.

Spencer, Herbert (1820-1903). One of England's foremost philosophers of evolution—an interpreter of life, mind and society in terms of matter, motion and force; an outstanding synthetic thinker; a relativist, an agnoistic. Born at Derby, England; lazy and disobedient as a student; owed his versatile scholarship almost wholly to private study, and his basic insights to a keen observation of nature; delicate physique; studied many subjects including engineering and journalism; edited the *Economist;* not rich, and suffered financial loss in publishing his works, but was ultimately a success; a man of unusual gift of exposition; virtually devoted a life-time to the building up of one of the monumental

philosophical systems. Main works: *System of Synthetic Philosophy* (1862-92); *On Moral and Physical Education* (1861).

Spinoza, Benedict (1632-1677). One of the greatest metaphysicians; sometimes regarded as the greatest metaphysician of the modern period—rationalist, neutral monist, pantheist; a typical spider-philosopher noted for the most thorough application of the mathematical method in philosophy. Born in Holland of wealthy Jewish parents; studied Hebrew literature in order to become a *rabbi*, but was dissatisfied with the Jewish philosophy; turned to philosophy and science; excommunicated for his religious views; finally settled at the Hague, and earned his livelihood by grinding lenses; a bachelor of a simple, quiet and secluded life. Main works: *Ethics* (1677); *On the Improvement of the Mind* (1677).

Whitehead, Alfred North (1861-1947). One of the greatest thinkers of the 20th century; a metaphysician and a mathematical philosopher; a monist declaring reality to be not a substance but a network of events. Born at Ramsgate, England; taught at Cambridge, London and Harvard; co-authored *Principia Mathematica* with Russell. Main works (besides *Principia): Enquiry Concerning the Principles of Natural Knowledge* (1919); *The Concept of Nature (1920); Process and Reality* (1929).

Wittgenstein, Ludwig (1889-1951). One of the most original and influential philosophers; sometimes regarded as the most important philosopher of the 20th century. Philosopher of language; most significant contribution: showing by an analysis of language that most philosophical questions are meaningless, that a study of the logic of language is fundamental to philosophy. Born in Vienna, Austria; originally an engineer; studied mathematics and philosophy at Cambridge; described as a "strange genius" who could shine almost in any field; served as a school teacher, in the army, and finally as Head of Department at the University of Cambridge; a bachelor of great mental suffering; gave away inherited wealth, and lived a most simple life. Key works: *Tractatus Logico-Philosophicus* (1922); *Philosophical Investigations* (1953).

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